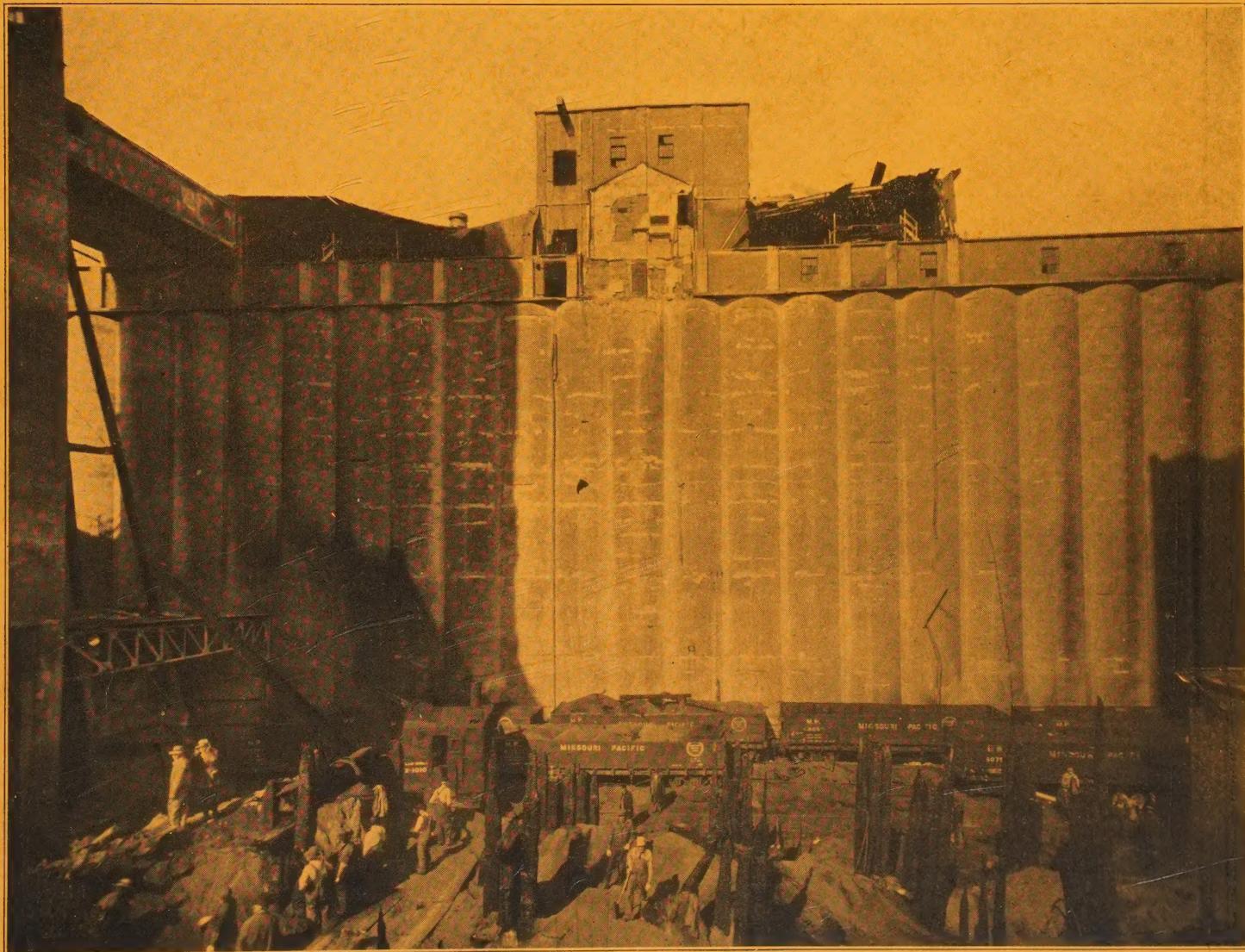


GRAIN & FEED JOURNALS

CONSOLIDATED

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

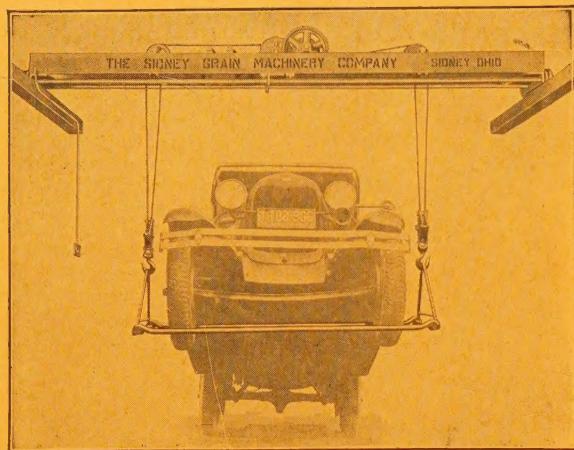
Clearing Away the Salvage of the Kansas-Missouri Elevator



Clearing Away the Salvage of the Kansas-Missouri Elevator's Wooden Workhouse at Kansas City, following the Fire and Dust Explosion. All Machinery in the Concrete Workhouse, at Left was Destroyed and Most of the Wheat and Corn it contained was badly Damaged. The Concrete Tanks Shown 50 ft. back of the Workhouse were Damaged by the falling Conveyor Galleries and the Grain Contained was Damaged by Fire and Water. The West Wall of the adjoining Drier House at the Right was Badly Damaged by the Intense Heat.

[Complete description pages 228-229]

SIDNEY ELECTRIC DUMP



For dumping in one or more pits. For trucks and wagons of any length. **EASY TO INSTALL and ECONOMICAL**

Heavy all steel construction, enclosed steel bronze worm gear, 2-h.p. motor, Timken roller bearing reversible switch, special cradle, best blocks and cable. Forty years experience building machinery for elevators and mills enables us to incorporate many new and improved features.

This is the last word in electric overhead dumps.

SIDNEY GRAIN MACHINERY CO.
SIDNEY, OHIO

TRIUMPH CORN SHELLER



The Triumph was invented by a practical mill man more than forty years ago. It has been improved and simplified since then, to be sure, but from the very beginning it was a popular success. Its operation is so simple—there are only two moving parts—and its construction so durable that it will operate year after year without need of repair. Its capacity is 75 to 100 bushels of shelled corn per hour; its power requirement only five or six horsepower.

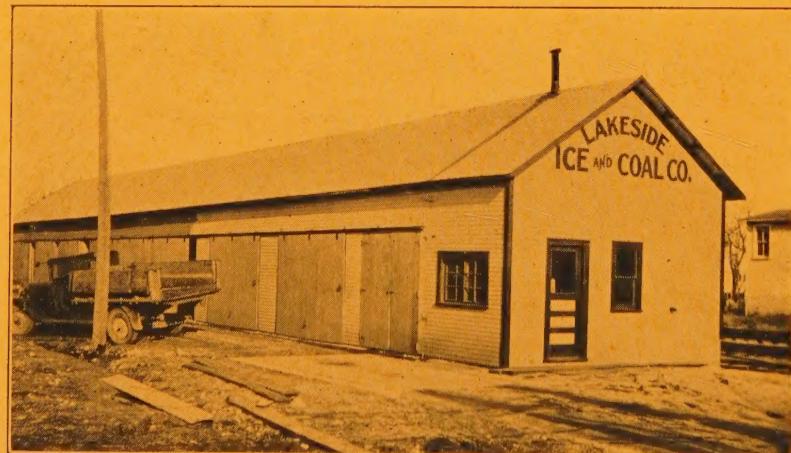
THE C. O. BARTLETT & SNOW CO.
6248 Harvard Ave., Cleveland, O.
Representatives for the Dominion of
Canada
PEACOCK BROTHERS LIMITED
Montreal

Bartlett - Snow

TWO STYLES FILL ALL NEEDS



*A copy of the
Triumph Corn
Sheller Catalogue
will be mailed with-
out charge.*



*Mr. Dix, Mgr. of the
Lakeside Ice & Fuel Co.
Milton, Wis.*

says:

"Yes, in addition to our own weighing the heaviest trucks are brought here to be weighed on my Gaston NO-TWIST—trucks too heavy for ordinary scales."

The weighbeam has the same sensitive action under heavy and light loads. My NO-TWIST passes official inspection regularly without question and without error."

The NO-TWIST will do **your** weighing with the same dependable accuracy as Mr. Dix' scale.

THE GASTON SCALE CO.

Beloit, Wis., U.S.A.

In business 90 years. — Not a part of any scale combine.

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS.

Grain Exchange Members

J. N. Beasley Elevator Co., Inc., grain and seeds.*
Burris Panhandle Elevators, public storage-mdsngs.
Great West Mill & Elevator Co., millers, grain dealers.
Hardenman-King Co., millers and grain dealers.*
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain, field seeds.*
Martin-Lane Grain Co., wholesale grain.*
Stone, Lester, grain merchant.*
Uhlmann Grain Co., export wheat, private wire.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BLOOMINGTON, ILL.

Baldwin Grain Co., grain brokers.*
Hasenwinkle Co., corn and oats.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Whse. Co., recrs., shpr., consmts.*
Cargill Grain Co., grain merchants.*
Lewis Grain Corporation, consignments.*
McConnell Grain Corp., brokerage & comm.*
McKillen, Inc., J. G., consignments.*
Voltz, E. L., grain drying a specialty.
Wood Grain Corp., consignments, brokerage.

CAIRO, ILL.

Board of Trade Members

Hastings Co., Sam'l, wheat, corn & oats.*
Thistlewood & Co., grain and hay.*

CEDAR RAPIDS, IOWA.

Mid-States Grain, Inc., cash grain.
North Iowa Grain Co., country run grain.*
Piper Grain & Mig. Co., receivers and shippers.*
Wilder Grain Co., track buyers grain-seeds.

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Bartlett-Frazier Co., grain merchants.*
Brennan & Co., John B., grain comm. merchants.*
Carhart-Code-Harwood Co., grain commission.
Feehery & Co., E. J., consignments, grain to arr.*
Hoit & Co., Lowell, commission, grain and seeds.*
Lamson Bros. & Co., grain, stocks, provisions.*
Logan & Bryan, grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.*
Rosenbaum Grain Corp., grain merchants.*
Ryan, James P., consignments.
Scott, Burrows & Christie, grain commission.
Shaffer Grain Co., J. C., grain merchants.*
Stratton Grain Co., grain merchants.*
Templeton's Sons, J. S., grain merchants.*
Winthrop, Mitchell & Co., grain commission.

CINCINNATI, OHIO.

Board of Trade Members

Cleveland Grain Co., grain commission.*
Early & Daniel Co., receivers and shippers.*

CLEVELAND, OHIO.

Grain & Hay Exchange Members

Bailey, E. I., shpr. grain, mill'd, oil and c.s. meal.*
Cleveland Grain Co., The, receivers and shippers.*

DALLAS, TEXAS.

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*
Hight Elevator Co., recvs.-shippers.*

DELPHOS, OHIO

Garman Grain Co., The, transit, kiln dried corn.*

DENVER, COLO.

Grain Exchange Members

Ady & Crowe Merc. Co., The, grain, beans, feeds.*
Keilogg Grain Co., receivers and shippers.*
Rocky Mountain Grain Co., exp. & domes. grain.*

*Members Grain & Feed Dealers National Assn.

ENID, OKLA.

Board of Trade Members

Bennett & Co., Jas. E., grain, provisions, stocks.
Enid Terminal Elev. Co., pub. storage, gr. mchts.*
General Grain Co., term. elvtr., gr. merchants.*

FORT DODGE, IOWA.

Bulpitt Grain Co., grain merchants.*
Christensen Grain Co., grain merchants.*
Davis Bros. & Potter, grain shippers.

FORT WAYNE, IND.

Egly, C. G., hay, grain, feed salt.*

FORT WORTH, TEXAS.

Grain and Cotton Exchange Members

Dorsey Grain Co., strictly brokers, consignments.*
Rogers Co., E. M., strictly bkg. and consignments.*
Smith Ingraham Co., domes., expt. & consignments.
Transit Grain & Com. Co., consignments, bkg.*

GALVESTON, TEXAS.

Board of Trade Members

Midwest Grain Co., Optrs. Grain Belt Elevator.
Owens Grain Co., Mill Buying.
Whalen Grain Co., wheat, corn, kafir, milo.

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*
Maibucher Grain Co., C. Wm., grain merchant.*
Montgomery & McConnel, receivers and shippers.
Steinhart Grain Co., commission and brokerage.*

KANSAS CITY, MO.

Board of Trade Members

Christopher & Co., B. C., consignment-futures.*
Continental Elevator Co., grain merchants.*
Davis-Noland-Merrill Grain Co., grain mchts.*
Ernst-Davis Commission Co., consignments.
Lichtig & Co., H. kafir, milo, screenings.
Logan Bros.-Hart Grain Co., receivers & shippers.*
Meservey O'Sullivan Grain Co., gr. mchts. congments.*
Moore-Seaver Grain Co., grain receivers.*
W. S. Nicholson Grain Co., strictly commission.
Norris Grain Co., wheat, oats, barley, corn.*
Rahn Grain Co., J. E., consignments.
Ry. Mountain Grain & Comm. Co., consignments.*
Scoular-Bishop Grain Co., consignments.*
Simonds-Shields-Lonsdale Grain Co., gr. mchts.*
Uhlmann Grain Co., grain merchants.*
Vanderslice-Lynds Co., consignments-futures.*
Wolcott & Lincoln, consignments, futures.
Wilser Grain Co., consignments.*

LANSING, MICH.

Lansing Grain Co., Rosen Rye, soft wheat, etc.*

LITTLE ROCK, ARK.

Farmer Co., E. L., brokers, grain and millfeed.

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MARYSVILLE, OHIO.

Board of Trade Members

Scott & Sons Co., O. M., soy beans.

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange

Donahue-Stratton Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Cargill Elevator Co., milling wheat.*
Cereal Grading Co., grain merchants.*
Fraser-Smith Co., grain merchants.*
Froedtert Grain & Malting Co., grain, millfeed.
Hallet & Carey Co., grain merchants.
Hiawatha Grain Co., screenings.*
McGuire Company, Arthur, shpr. b'wheat, m/wht.*
Ry. Mountain Grain & Comm. Co., consignments.*
Stuhr-Seidl, shippers grain and feed.*

OKLAHOMA CITY, OKLA.

General Grain Co., grain merchants.*
Hardenman-King Co., millers, grain dealers.*
Mid-State Grain Co., The, wheat, coarse grains & hay.

OMAHA, NEBR.

Grain Exchange Members

Bell-Trimble Co., recvs. and shippers.*
Butler-Welsh Grain Co., milling wheat and corn.*
Crowell Elevator Co., receivers, shippers.*
Flanley Grain Co., receivers and shippers.*
Scoular-Bishop Grain Co., wheat, corn, oats.*
Trans-Mississippi Grain Co., receivers and shippers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.
Cole Grain Co., Geo. W., receivers and shippers.*
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.*
Luke Grain Co., C. H., grain commission.*
Miles, P. B. & C. C., grain commission.*
Turner Hudnut Co., receivers and shippers.*

PHILADELPHIA, PA.

Commercial Exchange Members

Markley, P. R., grain broker.*
Richardson, Geo. M., grain and feeds.*

PITTSBURGH, PA.

Members Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*
Stewart & Co., Jesse C., grain and mill feed.*
Walton Co., Sam'l, receivers and shippers.*

PLANO, TEXAS

Hughston Grain Co., wheat, corn, oats, maize.

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Heald Grain Co., consignment specialists.*

ST. LOUIS, MO.

Merchants Exchange Members

Langenberg Bros. Grain Co., grain commission.*
Martin Grain Co., grain commission.*
Missouri El. & Grain Co., grain merchants.
Morton & Co., grain commission.*
Nanson Commission Co., grain commission.*
Teasdale Com. Co., J. H., recvs.-shpr. gr. seeds, hay.*

SALINA, KANS.

Eberhardt-Simpson Gr. Co., mchts. wh. & coarse gr.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SAN ANTONIO, TEXAS

King & Co., Douglas W., carlots-grain, hay, seed.*

SIDNEY, OHIO.

Custenborder & Co., E. T., buyers-sellers grain.*
Wells Co., The J. E., wholesale grain.*

SIOUX CITY, IOWA.

Board of Trade Members

Western Terminal Elevator Co., recvs. and shpr.*

TOLEDO, OHIO.

Produce Exchange Members

DeVore & Co., H. W., consignments and futures.*

TOPEKA, KANS.

Kansas Elevator Co., mfg. wheat specialists.

WACO, TEXAS

Clement Grain Co., grain, hay, seeds.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., optrs. Wellington Term. Elvtr.*

WICHITA, KANS.

Board of Trade Members.

Adair-Morton Grain Co., wheat, corn, oats, kafir.

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price Current-Grain Reporter (Est. 1844). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed, 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second-class matter November 21, 1930, at the postoffice at Chicago, Ill., under the act of March 3, 1879. Vol. LXVIII, No. 5. March 9, 1932.

Board of Trade
Members

CHICAGO

Board of Trade
Members

SPECIAL WIRE AND SALESMAN SERVICE
LAMSON BROS. & CO.

Established 1874

2200 Board of Trade

**GRAIN
STOCKS
PROVISIONS**

James E. Bennett

GRAIN
PROVNS
SUGAR
& Co. STOCKS
BONDS
RUBBER

MEMBERS
CHICAGO BOARD OF TRADE
AND ALL PRINCIPAL EXCHANGES

—PRIVATE WIRES—

Ask for Bids
**WHEAT, CORN, OATS
RYE, BARLEY, SEEDS**

CONSIGNMENTS

and orders in Futures Solicited and
properly cared for in all Leading Markets

ST. LOUIS KANSAS CITY
Merchants Exchange Board of Trade

INDIANAPOLIS
717 Board of Trade

PEORIA CAIRO
11 Board of Trade 403 Board of Trade
332 So. La Salle St., Chicago

A. O. Slaughter, Anderson & Fox
BROKERS
Grain — Stocks — Bonds — Commodities

MEMBERS

Chicago Board of Trade New York Stock Exchange
New York Produce Exchange Chicago Stock Exchange
Winnipeg Grain Exchange New York Curb Exchange (Ass.)
Minneapolis Chamber of Commerce

Henry A. Rumsey
Manager, Grain Department

120 S. La Salle St.
Chicago, Ill.

CARHART CODE HARWOOD CO.
Grain Commission
111 W. Jackson St. CHICAGO

LOGAN & BRYAN
4TH FLOOR, BANKERS BLDG., CHICAGO
Branch Office, Congress Hotel
BROKERS
Stocks, Bonds, Cotton, Grain,
Sugar, Cotton Seed Oil, Provisions
Private Wires Atlantic to Pacific

**Scott, Burrows
& Christie**

Siebel C. Harris
Mgr. Grain Dept.

208 South La Salle Street
CHICAGO

*We Specialize in Hedging and Spreading
Operations Between Terminal
Grain Markets*

E. W. BAILEY & CO.
COMMISSION MERCHANTS
GRAIN, SEEDS AND PROVISIONS 1142—44 Board of Trade, CHICAGO

BARTLETT FRAZIER CO.
GRAIN MERCHANTS

Receivers—Buyers—Shippers—Exporters

111 W. JACKSON ST., CHICAGO

JOHN E. BRENNAN & CO.
COMMISSION MERCHANTS
GRAIN and SEEDS
CHICAGO

Birmingham, Ala.—We value your
magazine very highly and do not want
to be without it.—Cecil Brokerage Co.

STRATTON GRAIN COMPANY

Grain Merchants

Chicago

Chicago, Ill.

New York

St. Joseph, Mo.

ELEVATORS:

Minneapolis

Portland, Me.

Depot Harbor, Ont.

Board of Trade
Members

CHICAGO

Board of Trade
Members

Ship Your Grain or Seeds and Send Your Orders to

J. H. DOLE & COMPANY
RECEIVERS and COMMISSION MERCHANTS

CHICAGO PEORIA ST. LOUIS

J. C. SHAFFER GRAIN CO.*Grain Merchants*111 W. Jackson St.
Chicago, Ill.**Winthrop, Mitchell & Co.**
Board of Trade - Chicago26 Broadway, New York
Kansas City Davenport
Rockford*Cash Grain — Futures
Stocks — Bonds
Provisions — Cotton*

**To BUY or SELL
RENT or LEASE
an ELEVATOR**

Place and adv. in the "Wanted" or
"For Sale" columns of the GRAIN
& FEED JOURNALS, of Chicago.
It will bring you quick returns.Merchants Exchange
Members**THOMSON & MCKINNON**NEW YORK INDIANAPOLIS CHICAGO
BROKERS—Grain, Provisions, Cotton, Sugar, Coffee, Stocks, Bonds
MEMBERS: New York Stock Exchange Chicago Board of Trade And All Leading
New York Cotton Exchange Chicago Stock Exchange Exchanges
209 South La Salle Street Telephone Wabash 4745**Rosenbaum Grain Corporation**

332 SOUTH LA SALLE STREET

Cash and Futures **CHICAGO, ILLINOIS** Private Wires**THE QUAKER OATS COMPANY**

BUYERS OF

Oats Corn Wheat Barley

Cedar Rapids, Ia. Ft. Dodge, Ia. Akron, Ohio St. Joseph Mo.

CHICAGO, ILLINOISMerchants Exchange
Members

ST. LOUIS

NANSON
Commission Co.
Grain
Hay - SEEDS
202 Merchants Exchange Bldg.
ST. LOUIS, MO.

**MISSOURI ELEVATOR
AND GRAIN COMPANY**
203 Merchants Exchange
ST. LOUIS, MO.
Operating Missouri Pacific Elevator
Capacity 4,000,000 Bushels

J. H. Teasdale Com. Co.
Merchants Exchange, St. Louis, Mo.
Receivers and Shippers
Grain, Seeds, Hay, Mill Products, Etc.
Efficient Service Since 1848

**LANGENBERG BROS. GRAIN
COMPANY**
Established 1877
ST. LOUIS NEW ORLEANS

Say you saw it in the
Journal
When you write our advertisers
Thanks

Grain Exchange
Members

DENVER

Grain Exchange
Members

Rocky Mountain Grain Co.
DENVER, COLO.
Grain Merchants
EXPORT AND DOMESTIC

KELLOGG GRAIN CO.
DENVER, COLO.
Receivers and Shippers
Of All Grains

The Ady & Crowe Mercantile Co.
Grain, Beans
Poultry and Animal Feeds
DENVER, COLO.

Board of Trade
Members

KANSAS CITY

Board of Trade
Members**SIMONDS-SHIELDS-LONSDALE GRAIN CO.**

Kansas City, Mo.

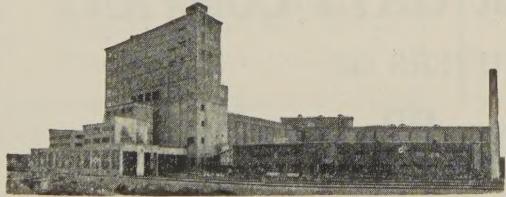
Specializing in Southwestern Corn

Wire Us for Prices

Capacity 7,000,000 Bushels

CONTINENTAL ELEVATOR Co.
KANSAS CITY
OPERATING
Continental Elevator
CAPACITY 2,500,000 BU.

UHLMANN GRAIN CO.
Board of Trade - Kansas City Fair Building - Ft. Worth, Tex.
Board of Trade - Chicago Produce Exchange - New York City
Operators of Wabash and Katy Elevators, 7,400,000 bushels capacity, at Kansas City

DAVIS-NOLAND-MERRILL GRAIN CO.

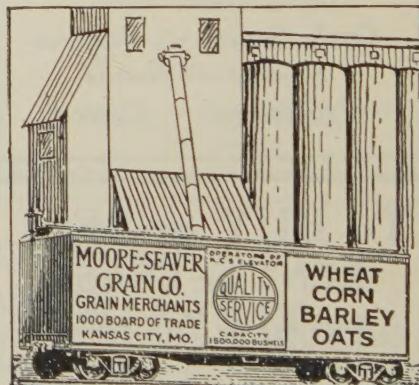
Ask for our bids on Wheat, Corn, Oats, Rye and Barley for
shipment to Kansas City and the Gulf—Special Bin Storage
Furnished at Regular Storage Rates.

Board of Trade
Kansas City, Mo.

Operating

SANTA FE ELEVATOR "A"
10,200,000 BUSHELS

Modern Fireproof Storage



WHEAT
and
OATS

NORRIS GRAIN CO.
Operators—Norris Elevator—K. C., Mo.

CORN
and
BARLEY

The Grain Trade's

accepted medium for "Wanted" and "For Sale" advertisements
is the semi-monthly Grain & Feed Journals Consolidated.

WOLCOTT & LINCOLN

Incorporated

Operating Alton Elevator

CONSIGNMENTS

Future orders executed in all markets.
801-810 Bd. of Trade, Kansas City
Hutchinson, Kans. Salina, Kans.
Wichita, Kans. Dodge City, Kans.
Wellington, Kansas

A Service of 52 Years Handling Consignments and Futures
B. C. CHRISTOPHER & COMPANY

200-206 Board of Trade, KANSAS CITY, MO.

BRANCH OFFICES—Wichita, Hutchinson, Salina, Great Bend, Colby, Dodge City, Liberal, Topeka, Atchison, Kansas, St. Joseph, Springfield, Sedalia, Joplin, Mo., Omaha, Nebr.

Everytime you mention the Grain Dealers Journal to an advertiser, you
encourage him to make good on his advertised claims.

Corn Exchange
Members

BUFFALO

Corn Exchange
Members

J. G. MCKILLEN, INC.
RECEIVERS
Consignments a Specialty
BUFFALO NEW YORK

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.

American Elevator & Warehouse Co., Inc.

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS
CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

Wood Grain Corp.
CONSIGNMENTS — BROKERAGE
BUFFALO, N. Y.

Lewis Grain Corp.
A good firm to consign to
Corn—Oats—Soft Wheat—Barley
BUFFALO NEW YORK

Board of Trade
Members

PEORIA

Board of Trade
MembersClark's Car Load
Grain Tables

Eighth edition, revised and enlarged, shows the following range of reductions of pounds to bushels by fifty pound breaks.

20,000	to	107,950	lbs. to bushels of	32	lbs.
20,000	"	74,950	"	34	"
20,000	"	96,950	"	48	"
20,000	"	118,950	"	56	"
20,000	"	118,950	"	60	"

Pounds in red ink; bushels in black. Linen ledger paper reinforced, bound in flexible karatol with marginal index. Weight, 6 oz.

Price \$2.50 f. o. b. Chicago

GRAIN & FEED JOURNALS
CONSOLIDATED
332 So. La Salle St., Chicago

LUKE Grain
Co., Inc.
Solicits Your Peoria Business
Consign Your Corn to Us
PEORIA, ILLINOIS

W. W. DEWEY & SONS
COMMISSION MERCHANTS
33-35 Board of Trade PEORIA, ILL.

Turner - Hudnut Co.
Receivers GRAIN Shippers
42-47 Board of Trade

P. B. and C. C.
MILES
Est. 1875—Inc. 1910
PEORIA, ILLINOIS
Handling Grain on Commission
Our Specialty

RECEIVERS, SHIPPERS AND BROKERS

WILDER GRAIN COMPANY
Cedar Rapids, Iowa
Merchandisers of Grain
Consignments Solicited

Crowell Elevator Co.
OMAHA, NEBR.
Federal Bonded Warehouse
Capacity 1,200,000 Bushels
Over 60 Years' Continuous Service

Reliable Service on
Consignments & Futures
Since 1887
H. W. De Vore & Co.
Toledo, Ohio

E. H. BEER & CO., INC.
Successors to
Chas. England & Co., Inc.
GRAIN—HAY—SEEDS
Commission Merchants
308-310 Chamber of Commerce, Baltimore

Grain & Feed Journals
Consolidated
The paper the Grain and Feed
Dealer supports, because it sup-
ports the Grain and Feed Dealer.

ENID TERMINAL ELEV. CO.
ENID, OKLA.
Total Storage 3,000,000 bus.
Milling Wheat a Specialty

THE EARLY & DANIEL CO.

RECEIVERS & SHIPPERS
CINCINNATI, OHIO
STORAGE CAPACITY 2,500,000 BUSHELS

Use Universal Grain Code
and Reduce Your Telegraph Tolls

Chamber of Commerce
Members

MINNEAPOLIS

Chamber of Commerce
Members

CEREAL GRADING COMPANY

CHAMBER OF COMMERCE, MINNEAPOLIS, MINN.

GRAIN

We Buy, Sell, Store and Ship All Kinds of Grain,
Choice Milling Wheat and Rye Selected by Ex-
pert Buyers. Own and Operate Elevator "L."HALLET & CAREY CO.
Grain Merchants
Minneapolis Duluth WinnipegFraser-Smith Co.
GRAIN
Minneapolis - - Milwaukee
Cedar RapidsCountry Offices:
Fairmont, Minn., Marshall, Minn.
Aberdeen, So. Dak.
Sioux Falls, So. Dak.
Devils Lake, N. D.

CARGILL

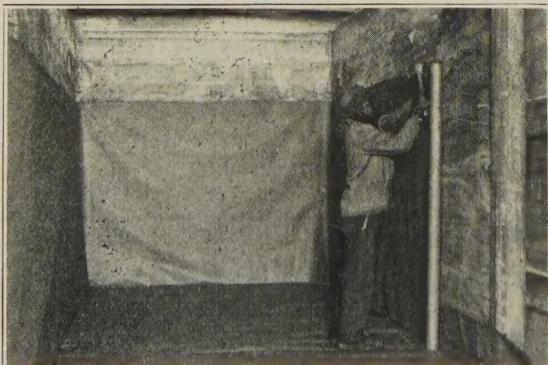
MINNEAPOLIS, MINN.

Terminal Offices:
Duluth, Milwaukee, Green Bay, Omaha
Chicago, Toledo, Buffalo, New York
Winnipeg, Man. Montreal, Que.

ELLIS DRIERS

Known the world over for reliability and
perfection of product. Direct Heat—Indi-
rect Heat—And Steam Heat. Also . . .A complete line of Rotary Driers and
Feeders for mill and feed plants.

The Ellis Drier Co.

2444-56 N. Crawford Ave.
Chicago, Ill., U. S. A.H-R
One Man Car LinerCan be installed in five minutes time
by one man.This liner comes in proper size to fit
the car—no cutting—no waste. It is
made of strong, tough paper which
eliminates leakage due to torn paper
etc.Cleaner, stronger, quicker, cheaper
and absolutely leak-proof.

Write for sample and prices.

Hummel-Ross Fibre Corp.

HOPEWELL, VIRGINIA

Also Manufacturers of

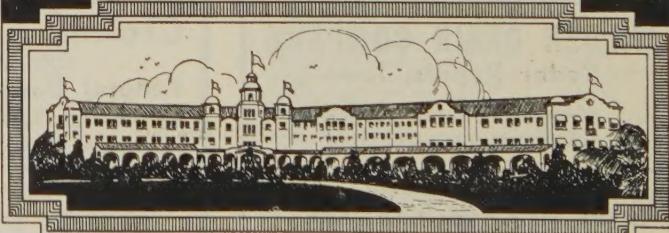
Leak-Proof Grain Door—Permanent and Removable Type

HOTEL
FONTENELLEOMAHA'S WELCOME
TO THE WORLD400 Rooms
with Bath from

\$2.50

100 Rooms Priced
From \$3 DOWN!
150 Rooms Priced
From \$3.50 DOWN!Luxurious Accommo-
dations
Popular Dining RoomsOPERATED BY EPPLEY
HOTELS COMPANY

OMAHA

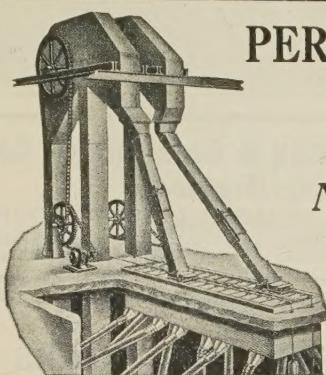
BEVERLY HILLS HOTEL
AND BUNGALOWSThe most distinguished
address on the Pacific Coast

RIDING · GOLF · TENNIS · DANCING

A ten-acre tropical garden midway between
Los Angeles and the sea... A homelike
home for particular people with the ocean
but fifteen minutes away

European or American Plan

William Marsh Kimball
Resident ManagerBEVERLY HILLS
CALIFORNIA



PERFECT CONTROL ^{of} your GRAIN DISTRIBUTING

Saves Time, Trouble, Money

Entirely unlike the radius-type distributor . . . you will find a vast improvement in the

New GERBER Double DISTRIBUTING SPOUT

For elevator legs of 1 to 4 stands, the New GERBER is made with single, double or multiple spouts. Distributes the grain from all legs to one bin or car at the same time; or each spout can distribute to separate car or bin. Each distributor operates straight away from leg; no circular swinging room needed. Connects and locks automatic-

ly to bin frame opening; no possible mixture of grains. Bin spouts equipped with reversible lugs to give you 4 successive wearing surfaces. Distributing Spouts easily operated by geared windlass from elevator working floor. Write for prices and names of nearby users.

J. J. GERBER SHEET METAL WORKS, 128 Sixth Ave. S., Minneapolis, Minn.

WHAT DO YOU NEED?

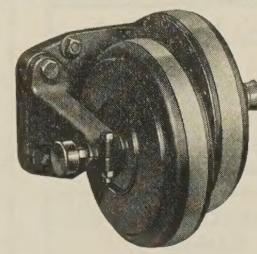
to modernize your plant so it will minimize your labor and increase your profits? Is it here?

Account Books	Head Drive
Attrition Mill	Leg Backstop
Bag Closing Machine	Lightning Rods
Bags and Burlap	Loading Spout
Bearings { Roller	Magnetic Separator
Ball	Manlift
Belting	Moisture Tester
Bin Thermometer	Motor Control
Bin Valves	Mustard Seed Separator
Bleachers and Purifiers	Oat Clipper
Boots	Oat Huller
Buckets	Plans of Grain Elevators
Car Liners	Portable Elevator
Car Loader	Power { Oil Engine
Car { Puller	Motors
Car { Pusher	Power Shovel
Car Scale	Railroad Claim Books
Cipher Codes	Renewable Fuse
Claim (R. R.) Collection	Rope Drive
Clover Huller	Safety Steel Sash
Coal Conveyor	Sample Envelopes
Corn Cracker	Truck
Conveying Machinery	Hopper { Automatic
Distributor	Scale Tickets
Dockage Tester	Scarifying Machine
Dump	Screw Conveyor
Dust Collector	Seed Treating { Machine
Dust Protector	Separator
Elevator Leg	Sheller
Elevator Paint	Siding-Roofing { Asbestos
Feed Formulas	Steel or Zinc
Feed Ingredients	Silent Chain Drive
Feed Mixer { Dry	Speed Reduction Units
Molasses	Spouting
Feed Mill	Storage Tanks
Fire Barrels	Testing Apparatus
Fire Extinguishers	Transmission Machinery
Friction Clutch	Waterproofing (Cement)
Grain Cleaner	Weevil Exterminator
Grain Drier	Wheat Washer
Grain Tables	
Hammer Mill	

Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

INFORMATION BUREO

Grain & Feed Journals, 332 So. La Salle St., Chicago



BUHLER DRIVE will save you hundreds of dollars

and an awful lot of worry.

The Buhler Drive takes the place of the usual eccentric shaft eccentrics and connecting rods. And besides oscillating the shoe it counterbalances it too.

May be had for both new and old separators.

Write for Catalog GD125

S. HOWES CO., INC.
INVINCIBLE GRAIN CLEANER CO.
SILVER CREEK, N. Y.

PROTECT YOUR GRAIN

with an approved, efficient and economical insecticide through the use of **SUNCO WEEVIL KILLER** with our new, effective spraying process, reducing the cost of treating **from 15% to 40%**.

Manufactured by

Sunflower Chemical Co.

BOARD OF TRADE

KANSAS CITY, MO.

GRAIN ELEVATOR BUILDERS

CHALMERS & BORTON
620 Pioneer Trust Bldg., KANSAS CITY, MO.
Engineers — Constructors
Grain Elevators — Feed Mills — Warehouses
Ask for Quotations on Your Work

Industrial Engineering & Construction Co.
Contracting Engineers
2730 Grove Street KANSAS CITY, MISSOURI
Grain Elevators Flour Mills
Feed Plants Warehouses Cold Storage Plants
Industrial Buildings

Stevens Engineering & Construction Co., Inc.
4121 Forest Park Blvd. ST. LOUIS, MO.
Designers and Builders
GRAIN ELEVATORS
Flour and Feed Mills Warehouses

WHEN WRITING ADVERTISERS
Mention Grain & Feed Journals Consolidated

Geo. W. Quick & Sons
Tiskilwa Illinois
Designers and Builders
Concrete Grain Elevators
Waterproof Pits a Specialty

CRAMER ELEVATORS
are preferred elevators because each is
designed and built to fit the individual
needs of the owners.
W. H. Cramer Construction Co.
North Platte, Nebr.
Plans and Specifications Furnished

YOUNGLOVE ENGINEERING CO.
Grain Elevators, Transfer Houses,
Feed Plants
Wood or Fireproof Construction
418 Iowa Bldg. Box 1172
Sioux City, Iowa Fargo, N. Dak.

A. F. Roberts Construction Co.
Sabetha, Kansas
ERECTS Elevators
FURNISHES Corn Mills
Warehouses
Plans
Estimates
Machinery

ROCHELLE & ROCHELLE
Designers and Builders of
GOOD ELEVATORS
Let us furnish your machinery
AMARILLO, TEXAS

Western Engineering Co.
713 Cooper Bldg. Denver, Colo.
Contractors and Builders of
Grain Elevators that more
than satisfy the most critical.

ORA LONG, Garden City, Kansas
Builder of Better GRAIN ELEVATORS

D. G. EIKENBERRY
Builder of Concrete and/or Wood
Elevators and Feed Mills.
Modern Grain Handling Machinery
Box 146 Bloomington, Ill.

Cover's Dust Protector
Rubber Protector, \$2.00
Sent postpaid on receipt
of price; or on trial to re-
sponsible parties. Has auto-
matic valve and fine sponge
H. S. COVER
Box 404 South Bend, Ind.

Ryan Construction Co.
503 Keeline Bldg. OMAHA, NEBR.
Engineers & Contractors
Grain Elevators - Feed Mills
Industrial Buildings
Flour Mills - Cement Plants
Coal Pockets

T. E. IBBERSON CO. — Grain Elevator Builders
Feed Mills — Coal Plants — Repairing and Remodeling
MINNEAPOLIS MINNESOTA

ZELENY
Thermometer System
Protects Your Grain
Estimates cheerfully given.
Write us for catalog No. 6.
Zeleny Thermometer Co.
542 S. Dearborn St. Chicago, Ill.

The CLIMAX
Scoop Truck
Cap. { 200 lbs. coal
2½ bus. grain
Easily adds 25c per hour to the value of a man's time in handling coal or grain. Strongly built and will give years of consistent service. Hundreds of them in use. Order yours now and reap the benefits.
Price: \$15 f. o. b. factory
DETROIT SCOOP TRUCK CO.
993 Osborne Place, Detroit, Mich.

CONCRETE GRAIN BINS
WE DESIGN AND ERECT GRAIN ELEVATORS BY THE POLK SYSTEM
WE SOLICIT YOUR INQUIRIES FOR
POLK GENUNG POLK CO.
FORT BRANCH INDIANA

ELEVATORS
—Hand Power and Electric—
MANLIFTS, DUMB WAITERS
ELECTRIC CONVERTERS for hand elevators. Our product is unsurpassed for efficiency and general reliability. When enquiring for estimate, state kind of elevator wanted, capacity, size, platform travel and height of hatch. Sidney Elevator Mfg. Co., (Miami St.) Sidney, Ohio

When writing advertisers mention Grain & Feed Journals Consolidated. By so doing you help both yourself and the publication.

THE Star Engineering Company
Designers and Builders of modern, efficient grain elevators, feed plants, and associated buildings. Every plant designed to best suit individual requirements.
Machinery Estimates Plans
WICHITA, KANSAS

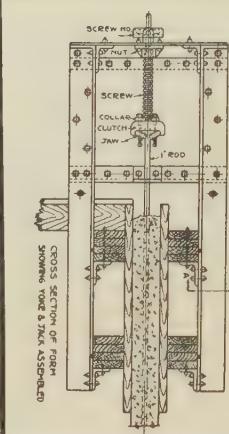
Jones - Hettelsater Construction Co.

Designers and Builders

Grain Elevators
Flour and Feed Mills

600 Mutual Bldg.

Kansas City, Mo.



SELL or RENT
Form Lifting
JACKS

Grain Elevators, Silo
Coal Pit Construction
Blue Prints Furnished

Nelson Machine Co.
Waukegan, Illinois

IT IS possible to equip your elevator with a complete Dust Control System that will reduce explosion hazards to the minimum—and at a low initial cost—and lower operating cost than the ordinary installation.

Ask for recommendations and prices

The Day Company

2938 Pillsbury Ave.

Minneapolis, Minn.

Inland Transportation Insurance

*Do You Transport Stock
by Truck? or by Rail?*

All hazards of transportation
should be covered by in-
surance in the

MILL MUTUALS

*Write your insurance company
or agency for particulars
or address*

MUTUAL FIRE PREVENTION BUREAU

230 E. Ohio Street Chicago, Illinois

1902 MARCH — APRIL — MAY 1932
Time for WINDSTORM INSURANCE
Write for the "TRI-STATE SAVING PLAN" for Grain
Elevators and other Mercantile Property
Also Residence Property insured against Fire and Windstorm
E. H. Moreland, Secretary Luverne, Minn.



Elevator Boot

Ball Bearing, Low Intake, Non-
chokeable, Automatic Takeups,
20" Diameter Pulley, Large Ca-
pacity.

*Use Rubber Covered Cup
Belt—It Pays*

WHITE ★ STAR ★
COMPANY
Wichita, Kansas

Headquarters for
GOOD ELEVATOR EQUIPMENT

Place Your Name

and business before the progressive grain ele-
vator men of the entire country by advertising
in the Grain & Feed Journals Consolidated. It
reaches them twice each month.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

KANSAS—Six elevators for sale. Address 67X9, Grain & Feed Journals, Chicago, Ill.

SOUTH CENTRAL IOWA—Line of six elevators for sale at a bargain. Good grain territory. O. A. Talbott, Keokuk, Iowa.

STOP! READ! THINK! One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now!

INDIANA—Four Grain Elevators for sale to settle estate. 12, 15, 20 and 25,000 bu. capacity. Will price separately. Well located. Write J. D. Higbee, Elwood, Ind.

CENTRAL SOUTH DAKOTA—20,000 bus. elvtr. for sale in live town; only house; built 1931. Strictly modern. Box 1233, Huron, S. D.

MICHIGAN—Elevator for sale, handles hay, grain, beans, potatoes and seeds. Home all modern. Write for details, Box K, Mesick Grain Co., Mesick, Mich.

NORTHEASTERN COLORADO—Line of 12 elevators for sale at bargain, good grain territory. Also 1,200 barrel concrete flour mill and elevator at Denver. Harry Zimmerhakel, Receiver, Longmont Farmers M. & E. Company, Denver, Colorado.

YOU MAY BE MISSING SOMETHING
AN ILLINOIS elevator company running a 3 line ad in one issue says: "We had 25 applications from that ad. Thank you."

N. W. OHIO—12,000 bu. capacity elevator for sale. Concrete block feed building, with 24-in. Bauer Attrition Mill. Located on main line of Penna. R. R., one block from Court House, town of 10,000 pop. Excellent grain, feed and coal trade. Write The Van Wert Equity Exchange Co., Van Wert, Ohio.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

MINNESOTA cleaning and transfer elevator for sale; 130,000 bushels; three track scales; good cleaning machinery; electric power good condition. Excellent transit location; fine dairy territory. Bargain easy terms payment. Write 66B6, Grain & Feed Journals Consolidated, Chicago, Illinois.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

ELEVATOR WANTED TO LEASE

WANT TO BUY OR LEASE Elevator in Kansas. Write 68E3, Grain & Feed Journals, Chicago.

WANT TO BUY OR LEASE Elevator in Corn Belt, handling at least 125 cars. Write details to L. T. McCabe, 111 Lanewood Ave., Alhambra, Cal.

WANT TO LEASE Elevator in good grain territory in Ill. or Ind., preferably Ill. Elevator Must be in good condition and priced right. Write 68C10 Grain & Feed Journals, Chicago.

NO NEED FOR FORMALITIES—You don't need an introduction to Journal Want-Ads. They will help you without, whatever your problems may be.

ELEVATORS WANTED

IF YOU DO NOT find the elevator you want advertised, place your wants in the "Elevators Wanted" section and you will receive full particulars regarding many desirable properties not yet advertised.

ELEVATOR BROKERS

ALWAYS HAVE ELEVATORS for sale. To save time, please state amount you wish to invest and location you prefer. James M. McGuire, 6440 Minerva Ave., Chicago, Ill.

Some SERVICE to your ads. I sold my elevator to the first man that answered my ad. But I received a nice number of inquiries, too. Kansas Dealer.

ELEVATOR, GENERAL FEED AND SEED BUSINESS

CENTRAL OHIO—Grain elevator, general feed and seed business for sale, coal bins, plenty of trackage. Good farming district. Box 312, Ashley, Ohio.

FEED MILL AND GRAIN ELEVATOR

S. E. WISCONSIN Feed Mill and Grain Elevator for sale, doing cash business. Milwaukee Mill & Pulverizer Co., Milwaukee, Wis.

MILLS FOR SALE

OHIO BARGAINS—144 bbl. mill for sale at West Lafayette; 200 bbl. mill at Coshocton, or the machinery will be sold from either mill. Full description and prices furnished on request. The Hanley Mfg. Co., Mansfield, Ohio.

FEED MILL FOR SALE

MINN.—Good feed mill business for sale, running a 60-h.p. Diamond Huller attrition mill; 30-h.p. Jay Bee hammermill. Cheap if taken at once. F. Vander Eyk, Box 316, Clinton, Minn.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4 1/2x7 inches. Have limited supply to sell at \$2.60 per hundred or in lots of 500, \$2.30 per hundred f. o. b. Chicago. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

BUSINESS OPPORTUNITIES

IOWA—Write for price and description of flour, corn and feed mill, elevator, storage for flour and feed. Big snap. Address A. G. Ensign, Hawarden, Iowa.

CALIFORNIA—This is not a bargain but an opportunity for one to buy a money making business at its actual worth. Mfrs. of poultry and dairy feeds, grain milling, feeds and seeds. Address Box 187, Holtville, Calif.

Bargain Sale in Soiled and Shelf Worn Books

Universal Grain Code.—Compiled especially for grain dealers and millers, to reduce telegraph tolls and to prevent expensive errors. Contains no ambiguities. Complete and up-to-date. 150 pages, 4 1/2x7 ins. Paper bound, price 75c and postage. Order "Special Universal Grain Code."

Memo of Agreement.—Grain contracts for contracting grain and seed from farmers; is extensively used by grain dealers to avoid taking chances with verbal contracts. Originals are printed on bond paper, machine perforated so they may be easily removed; duplicates are also on bond paper. Check bound, 50 sets to a book with two pieces of carbon paper. Order by name, special price 75 cents to close out.

Gold Bricks of Speculation, a study of speculation and its counterfeits and an expose of the methods of bucketshop and "Get-Rich-Quick" swindles. We have a few of these interesting books soiled from display, written by John Hill, Jr., of the Chicago Board of Trade, which we will send on receipt of \$1.00 each and postage to carry. Weight 4 lbs. Order "Gold Bricks of Speculation Special."

Improved Railroad Claim Blanks require little of your time for filing, and contain spaces for all the necessary information in the order which assures prompt attention on the part of the claim agent. They increase and hasten your returns by helping you to prove your claims and by helping the claim agent to justify payment. Are printed on bond paper, bound in books, each containing 100 originals and 100 duplicates, with two-page index, instructions and summary, with four sheets of carbon. The original is sent to the claim agent, and carbon copy remains in the book, as a record of your claim. Sells for \$2. Have few loosely bound and soiled, one at \$1, four at \$1.25 and two at \$1.50. Order 411-E (overcharge in freight or weight) "Special."

Clark's Double Indexed Car Receiver's Register gives ready reference to the record of any car. Facing pages 11x16 inches of heavy ledger paper are each ruled into five columns, those on the left being numbered 0, 1, 2, 3 and 4, while columns on the right are numbered 5, 6, 7, 8 and 9. Each column is ruled into three distinct divisions with the following sub-headings: "Initial," "Car No." and "Record." The marginal index figure which is repeated in upper corner of each right hand page represents the right hand or unit figure of the number entered, while the column heading is the second or tens figure. The required number can be instantly found if properly entered. Form 40, with space for 12,000 cars, sells new for \$2.50, and Form 42, with space for 21,600 cars, \$3.25. Have two pretty badly soiled Form 40 "Special" for \$2.

All prices are f. o. b. Chicago.

GRAIN & FEED JOURNALS Consolidated
332 South LaSalle St. Chicago, Ill.

Receiving Books For Grain Buyers

Duplicating Contract Book, for the purchase of grain from farmers. Contains 100 originals printed on bond paper and perforated, and 100 duplicates on manila, with ruled spaces on the back for entering amounts delivered, numbered in duplicate. Check bound, size $5\frac{1}{4} \times 8\frac{1}{4}$ inches, supplied with four sheets of carbon. Order Form 10DC. Price \$1.15. Weight 1 lb.

Receiving and Stock Book for keeping a record of each kind of grain received in separate columns, so buyer may easily determine total amount of any kind of grain on hand. Size $9\frac{1}{4} \times 11\frac{1}{2}$, 200 pages, with a capacity for 4000 wagon loads. Well printed on linen ledger paper, bound in strong board with leather back and corners. Order Form 321. Price \$8.00. Weight 2 $\frac{3}{4}$ lbs.

Scale Ticket Copying Book contains 150 leaves of scale tickets, four to a leaf. Each leaf folds back upon itself, so that with the use of carbon paper, it will make a complete copy of the original on the stub, with one writing. Original tickets forming the outer half of leaf are machine perforated. Printed on bond paper, check bound, size $9\frac{1}{4} \times 11$, supplied with four sheets of carbon. Order Form 78. Price, \$1.55. Weight 2 lbs.

Grain Scale Book, a combined Journal and Receiving book with index. Each man's grain is entered on his own page, or a page may be allotted to each kind of grain received. Both debits and credits are posted to the ledger. Contains 252 numbered pages and index, size $10\frac{1}{4} \times 15\frac{1}{4}$, and will accommodate 10,332 wagon loads. Printed on linen ledger, bound in extra heavy black cloth covers, with leather back and corners. Order Form 28. Price \$4.75. Weight 5 lbs.

Grain Receiving Register is designed for recording the receipts of wagon loads of grain. Loads may be entered in consecutive order, or different sections of the book may be devoted to different kinds of grain. Book contains 200 pages of linen ledger paper, size $8\frac{1}{4} \times 14$ inches, each of which is ruled for 41 entries, giving a total capacity of 8200 wagon loads. Well printed and substantially bound in full canvas. Order Form 12AA. Price \$3.00. Weight 3 lbs.

Duplicating Wagon Load Receiving Book, designed to facilitate the recording of number of loads from one farmer in a short time. Book contains 225 leaves, size 12×12 inches with 33 lines each, perforated down the middle; the inside half of the leaf remains in the book, and the outer half with the same ruling printed on the reverse side, folds back over the left half with carbon between. Outer half is given to farmer. It may also be used by line agents in making daily reports to headquarters. Check bound with canvas back, nine sheets of carbon. Order Form 66. Price \$3.00. Weight 4 $\frac{1}{2}$ lbs.

Grain Receiving Ledger, may be used first as a Stock Book by posting the receipts daily, weekly or monthly from some other portion of this book, or from any other scale book, giving a page to the commodity handled; Second, as a patrons' ledger, by giving a full or half page to each patron; Third, pages may be used to enter each load of grain received in consecutive order under their respective commodity headings. The book contains 200 numbered pages with 44 lines each, and marginal index in front, size $8\frac{1}{4} \times 13\frac{1}{4}$, ruled with the usual column headings, including Debit and Credit columns. Printed on linen ledger paper and well bound in black cloth sides with keratol back and corners. Order Form 43. Price \$3.50. Weight 3 lbs. Form 43XX contains 400 pages same as above. Price \$5.50. Weight 4 $\frac{1}{2}$ lbs.

All Prices are for Chicago Delivery.
Postage Extra.

Printed and Supplied by

Grain & Feed Journals Consolidated

332 South La Salle St. Chicago, Ill.

MACHINES FOR SALE

ONE BARNARD & LEAS Plansifter for sale, size 0 $\frac{1}{2}$; good as new. Miller Mfg. Co., Miller, Mo.

AIR BLAST Car Loader, new, guaranteed. Attractive prices. Standard Mill Supply Company, Waldheim Bldg., Kansas City, Mo.

RECONDITIONED HAMMER Grinder for sale. Right size for elevator or feed store use. Guaranteed and priced right. Papac Machine Co., 22-24 S. Senate Ave., Indianapolis, Ind.

GRAIN SCALES, Separators, Feeders, Elevator Belts, cups, heads and boots for sale. Anything for Feed Mills and Elevators. Write me for your wants. E. J. Dalby, No. 4 Flour Exchange, Minneapolis, Minn.

BAG CLOSING Machines, Elevators, 3 pair high Feed Mills, Driers, Attrition Mills, Richardson, Fairbanks, Smith Scales. Pulleys, Shafting, Hangers, Belting. Mixers all sizes. Write Standard Mill Supply Company, Waldheim Bldg., Kansas City, Mo.

AN OPPORTUNITY—One J. B. No. 2 Hammer Mill for sale, complete with 25-h.p. Fairbanks Morse Motor and Starter; One No. 1 Anglo American Vita Cereal Mill; One 22" and one 20" Under Runner Mortise Gear Drive French Buhr Mills. Milwaukee Feed Co., Excelsior Springs, Mo.

FOR QUICK DISPOSAL—Used attrition mills \$75.00 to \$600.00; 40-h.p. direct connected hammer mill \$550.00; 50-h.p. complete with magnetic separator, almost new direct connected \$900.00; seed cleaners, corn shellers, transmission, oat hullers, motors, rotex sifter and other equipment cheap. Send us your wants. Sidney Grain Machinery Co., Sidney, Ohio.

NEW AND REBUILT MACHINERY
Rosco Oat Huller; Carter Disc Separator; Used Attrition and Hammer Mills; Dings Magnetic Pulley; Car Puller; Grain Driers; Motor Driven Car Loader; $\frac{1}{2}$, 1 and 4-bu. Richardson Automatic Scales; Exact Weight and Hopper Scales; 1-ton Eureka Horizontal Mixer; $\frac{1}{2}$ and 1-ton Vertical Batch Mixer; Pancake Mixers; a Special Wheat and Corn Cleaner, New; Bag Piler; Corn Crackers; Graders; Corn Shellers; Corn Cutters; Corn Cob Crushers; Oil Engines and Motors. Send us a list of your wants, we can supply you with all machinery for Molasses, Stock and Poultry Feed; also Complete Elevators; Flour and Corn Mills. We sell for less. A. D. Hughes Co., Wayland, Mich.

REAL BARGAINS
Prompt Attention. Quick Shipments. When in need of elevator or mill machinery, notify us. We are headquarters for power and transmission equipment, and have on hand several well-known makes of motors, boilers, engines, etc.

Send us list of all your wants. We can supply you with full line of machinery for elevators, flour, corn and cereal mills. Complete equipment for modern mills of all kinds, molasses, stock and poultry feed plants, plans, specifications, flow sheets, etc., our specialty.

Write us without delay.
SPROUT, WALDRON & CO.
9 S. Clinton St., Chicago, Ill.

SAMPLE PANS



Made of sheet aluminum, formed by bending, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of the metal will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, $2\frac{1}{2} \times 12 \times 16\frac{1}{4}$, \$2.00

at Chicago.

Seed Size, $1\frac{1}{2} \times 9 \times 11$, \$1.65

at Chicago.

GRAIN & FEED JOURNALS

CONSOLIDATED

332 So. La Salle St., Chicago, Ill.

MACHINES WANTED

GRAIN AND SEED Cleaner wanted, 200 to 400 bu. capacity wheat per hour. Lock Box 418, Blanchester, Ohio.

WANTED TO BUY good second-hand J-B Mill No. 5 Model T for grinding fish meal. Quinn's Menhaden Fisheries. Morehead City, N. C.

WANTED—1 Rotex or Gyro Sifter; 1 two-stand high or three-roll Roller Mill. Have 1 No. 7 Sullivan Crusher to trade or sell. Write H. B. Luethy Casein Co., Byron, Wis.

WANTED—Grain Dealers who are contemplating installing new machinery to use the "Machines Wanted" columns of GRAIN & FEED JOURNALS in securing prices and estimate of machines for sale. We can save you money. More than value received.

BAGS AND BURLAP

DEPENDABLE ONCE USED Burlap and Cotton Uniformly sized bags. Suction cleaned and turned. Priced right. Complete stock at all times. J. Bleichfeld Bag & Burlap Co., 15 E. Peckham St., Buffalo, N. Y. Established over thirty years.

Leaking Car Report Blanks

bear a reproduction of a box car and a form showing all points at which a car might leak, thus facilitating reporting specific places where car showed leaks at destination. One of these blanks should be sent with papers for each car with the request that it be properly filled out and returned in case of any signs of leakage. Printed on Goldenrod bond, size $5\frac{1}{2} \times 8\frac{1}{2}$ inches, and put up in pads of 50 blanks. Order Form 5. Weight, 3 ounces. Price, 40c a pad; three for \$1.00. Prices f. o. b. Chicago.

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St., Chicago, Ill.

Cipher Codes

Universal Grain Code: Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, $4\frac{1}{2} \times 7$ inches. Price, leather bound, \$8.00; paper, \$1.50.

Robinson Telegraph Cipher Code: With all supplements, for domestic grain business. Leather bound, \$2.50; cloth, \$2.00.

Millers Telegraphic Cipher: (1917) For the milling and flour trades. 77 pages, $8\frac{1}{4} \times 6$ inches. Cloth bound. Price \$2.00.

Cross Telegraphic Cipher Code: 9th edition revised for provision and grain trades. 145 pages, $4\frac{1}{2} \times 5\frac{1}{2}$ inches. Cloth bound. \$8.50.

A. B. C. Improved Fifth Edition Code, with Sup.: Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. In English. Price, \$20.00.

Bentley's Complete Phrase Code: Contains nearly 1,000 million combinations, any two of which can be sent as one word. Thru its use a saving of 50% can be effected in cablegrams. 213 pages. Appendix of 60 pages contains decimal moneys and list of bankers. Private supplement of 68 pages; Ciphers arranged in Terminational Order, 40 pages, contains decimal moneys and list of bankers. $8\frac{1}{2} \times 10\frac{1}{2}$ inches. Leather back and corners. \$10.00.

Baltimore Export Cable Code: Hinrich's fourth edition, completed especially for export grain trade. 152 pages, $6\frac{1}{2} \times 9$ inches, bound in leather. Price \$15.00.

Riverside Flour Code, Improved (5 letter revision): Sixth edition. For use in domestic and export trade. Size 6×7 inches, 304 pages. Bound in flexible leather, \$12.50.

Calpack Code (1923) is designed to succeed and replace the codes published by the J. K. Armsby Co., and the California Fruit Canners' Ass'n in the fruit and vegetable packing industry. Size $6\frac{1}{4} \times 8\frac{1}{4}$ inches. 850 pages, bound in keratol. Price \$10.00.

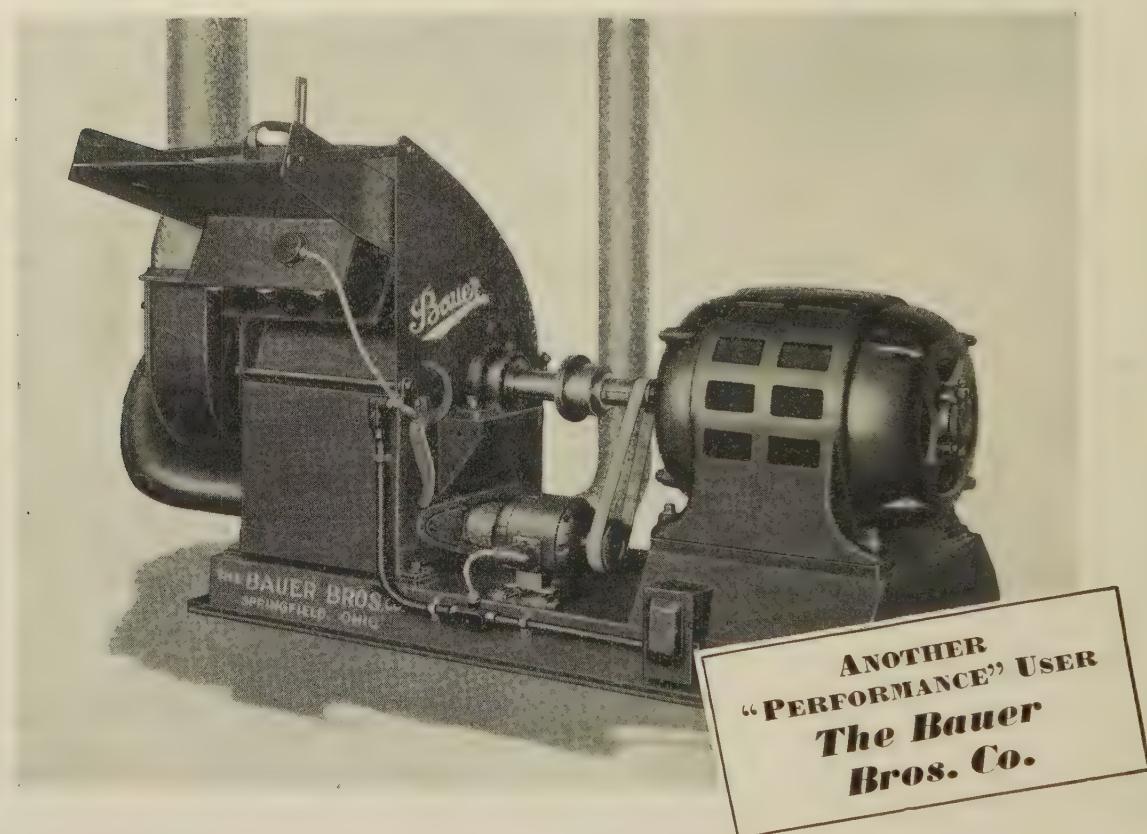
All prices are f. o. b. Chicago.

GRAIN & FEED JOURNALS

CONSOLIDATED

332 So. La Salle Street CHICAGO, ILL.

MORE PERFORMANCE WITH SKF FOR YOUR BEARING DOLLAR



WHERE PERFORMANCE TAKES PREFERENCE OVER PRICE

QUICK FACTS...dependability, economy, uniform quality of product...three points of vital interest in the grain and feed industries. Years of experience have shown conclusively that **SKF** Ball Bearings are an important factor toward the realization of all three objectives. An indication of why "SKF Performance Takes Preference Over Price" when new equipment is considered.

You may buy a bearing as a bargain but try and get a bargain out of using it, for nothing is apt to cost so much as a bearing that cost so little.

On the Bauer all steel hammer mill, **SKF** Self-Aligning Ball Bearings support the main shaft, insuring consistent performance at all times...free from bearing trouble. And this high degree of reliability continues throughout a long life with very little attention. Of particular value on applications of this type is the inherent self-aligning feature of the bearings.



SKF INDUSTRIES, INC. 40 EAST 34th STREET, NEW YORK, N. Y.

2841

SKF

Ball and Roller Bearings

GRAIN & FEED JOURNALS

CONSOLIDATED

332 S. La Salle St., Chicago, Ill., U. S. A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR & GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT-GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improvement of grain, feeds and seeds.

SUBSCRIPTION RATES to United States and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy, 25c.

To Canada and Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain and Feed Journals Consolidated as a medium for reaching progressive grain feed and field seed dealers and elevator operators is unquestioned. The character and number of firms advertising in each number tell of its worth. Member A. B. C.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, MARCH 9, 1932

BRAZIL burned another hundred thousand bags of valorized coffee last week in its vain attempt to boost the price to foreign buyers and thereby set a good example to the blundering price pegging Farm Board.

NOW IF Congress would appropriate the balance of the Farm Board's wheat holdings for the relief of the farmers, same to be given to producers living on farms, the surplus would be quickly dissipated and the producers relieved of its depressing influence.

METHODS ADOPTED by the Indiana Grain Dealers Ass'n to handle the electric power rate adjustment can well be copied in other states, as the efforts of the Indiana com'ite promise a saving of \$15 to \$40 per month to the elevators using commercial current.

GRAVITY feed gas engines are so hazardous few cautious fire insurance companies will insure grain elevators containing them, and recent fires traceable to such equipment fully justify the stand taken by experienced engineers against this dangerous fire promoter.

WEEVIL are taking advantage of the open winter and multiplying rapidly in every bin not frequently inspected.

AS SOON as Jack Frost starts coming to the surface, wagon and truck scales will need careful inspection and re-sealing if they are to be depended upon for accurate weights.

CLOVER SEED thieves must be guarded against in territory in which they have not hitherto operated. From Michigan and Indiana they have moved into Illinois.

ILLINOIS buyers of grain from growers will profit by reading the article "Statutory Liens on Grain" published elsewhere, since it makes clear the steps to be taken to protect themselves from the claims of landlords, threshermen and others.

EVERYONE seems to approve of the Government's donation of forty million bushels of Farm Board wheat to the unemployed, but why hold onto the rest of it? Keeping it in the public show windows serves only to depress the market and discourage producers.

AFTER the government at heavy expense had drained off the land along the water-courses the soil was found unadapted to agriculture and the engineers at the Louisville drainage congress recently urged that the water be put back on again for the conservation of wild life. Investigation might have disclosed the nature of the soil before draining.

FARM STOCKS of wheat are larger now than at any Mar. 1 for the past ten years; and while this does not spell satisfactory prices to the grower it indicates a good volume of business for the country grain buyer for the remainder of the crop year. This back-log of business is buttressed by the excessive stocks of corn back on the farm, which are more than 5 per cent above the 10-year average of the crop on Mar. 1, being 1,152,000,000 bus., on this date against 761,103,000 bus. a year ago.

WRECKING of the safe of the grain company at Marengo, Ia., recently by cracksmen points to the need of greater cooperation between the grain dealer and the robbers. This safe was left unlocked. If the manager had left a neat card hanging to the combination knob informing the safe blowers that it was unlocked, the burglars would have saved their nitroglycerine and the grain company its safe. Many thieves do not know that the grain man keeps his money in the bank.

PRICE CUTTING as well as over-bidding has always brought disaster to the active participants, but in some districts afflicted with portable mill competition, established elevator operators are taking turns at cutting the price for grinding to a figure which cannot be met, even by the portables. So the elevator men thus join in the expense of driving the portables out of the territory. In the meantime they must depend upon other departments of their business for profits.

GRAIN DEALERS can help to protect the wheat growers of the land by demanding that no sales tax be levied on grain or its products. The great army of unemployed cannot afford to pay any tax on a necessity of life and the assessing of a manufacturers sales tax on the staff of life would serve only to multiply the difficulties of citizens least able to meet them.

GRINDING is the only service the portable operator has to sell, so if the elevator man reduces his charge to a price the portable can not afford to meet, the nomad will go off to other territory and the elevator operator can recover his loss thru extra profits on non-competitive business. When the fly-by-night has departed the elevator operator can raise his charge to a living figure.

THE DEMAND for thorough investigation of the work of the Federal Farm Board and especially its bungling methods which have resulted in such a distressing depression of the market prices of wheat and cotton, is being echoed from every agricultural district. Farmers generally are beginning to sense the cost to them of governmental interference with their markets.

ELEVATING grain by air has always been an attractive proposition due to its simplicity and the cooling and cleaning effect of the air current; but until recently no organized effort has been made to introduce the method in country elevators, as one consequence of recent experiments there may soon be available records of the cost of operation compared with the old style bucket and belt.

FARM BOARD subsidiaries handling grain pretend to be doing much for the grain producers, but they are conspicuous by their absence from hearings on freight rates. At the Lincoln, Neb., hearing on advances reducing the price paid for grain one to four cents per bushel no representatives of the growers or pools were present, altho the regular grain trade was there in force.

ANY LEGISLATION designed to limit or regulate short selling or long buying will hurt the producers of the commodity handled even more than the traders who are being shot at by the political racketeers in the hope of attracting the attention of voters. The greater the freedom of buyers and sellers of any commodity from governmental interference, the more attractive will the market be to speculators and the more helpful will their operations prove to the producers.

HUTCHINSON, Kan., chose to remain outside the spying range of the U. S. Grain Futures Administration by voting 30 to 18 against accepting the future trading license offered by the Washington officials. Moreover, should the bureaucrats succeed in their attempts to have the law changed to permit them to write the rules for the grain exchanges Hutchinson fortunately will be outside their jurisdiction. The meddling bureaucrats help only to drive buyers out of the farmers markets.

WISE shippers are watching for markets that are bidding high, such as Kansas City, which temporarily is attracting corn from Illinois.

WHEN contemplating engaging in the operation of a bulk oil filling station in connection with the grain elevator it is advisable to read the regulations put out by the state fire marshals and consult the service departments of the mutual fire insurance companies.

BANK failures in recent weeks have been fewer than at any time during the past year, Bradstreet reporting only 12 for the entire country for the week ending Feb. 25 against 93 in one week last fall; but draft bond insurance is still an advisable protection for the funds of grain shippers being collected.

INCREASED TAXATION is the only way the people of the United States can meet the swollen costs of government; and this means a greater spread between what the producer receives and the consumer pays. The seriousness of this burden on the producer becomes apparent when we consider the increase in the tax from 6½ per cent of the national income in 1913 to 30 per cent in 1931. As the burden can not be borne two alternatives present themselves: either cut government expense or inflate prices by depreciating the currency.

GRAIN ELEVATOR operators in the territory of the Central States Grain Ass'n naturally are refusing to have anything to do with the pool which is trying to induce the elevator owners to furnish elevator facilities and handle the grain for 3 cents a bushel. This is not enough to pay for taxes, insurance and the interest on investment, and the mechanical cost of handling the grain through any elevator is at least 2½ cents a bushel, so the elevator man who does sign such a contract will soon be in the hands of the sheriff.

GRAIN SHIPPING CONTRACTS should be made self-explanatory without too much reliance on the rules of the exchanges or of the grain dealers ass'ns, in view of the decision of the court some time ago that Minneapolis was not a terminal market and the decision last month by the arbitration com'ite of the Grain and Feed Dealers National Ass'n that Topeka was not a terminal market, as published elsewhere in this number, and terminal market rules are not applicable to the contracts except by special provision to that effect.

CREDIT POLICIES that are unduly lenient are harmful both to the elevator company and to farmer patrons. The grower who leaves his grain to be settled for later makes it possible for the elevator manager to ship out the grain without a hedge, and all that that implies. And the grain dealer who trusts patrons for side-line merchandise makes it possible for the farmer to make unwise expenditures in other directions that prevent closing the account and leave the elevator operator with a big bundle of accounts receivable.

ADMISSION OF yellow hard wheat to the contract grades of the Chicago Board of Trade as contemplated by a vote on Mar. 11 will remove this discrimination against a variety grown largely in the territory tributary to Chicago, after which hair-splitting interpretations by the federally licensed inspectors and boards of appeals will no longer disturb buyers and sellers on contract. Those who do not want yellow hard can find what they want on the sample tables.

Public Employees in Commercial Pursuits

The deplorable practice of county, state and federal educators using their titles to exploit cooperative and individually manufactured products is severely criticized in a resolution adopted by the Eastern Federation of Feed Merchants, reported in this number.

The laws creating the positions of the public educators never contemplated the use of the positions in the manner objected to by the Eastern Federation.

The practice is more widely spread among the extension specialists and other educators than is commonly supposed. Not alone by word of mouth do they practice it but by the news releases sent by the Colleges of Agriculture to country and metropolitan newspapers and various trade papers, where acceptance of the material is likely to give widespread credence to the commercial recommendations.

One such from State Seed Commissioner of Indiana calls attention to a circular entitled "Inspection of Agricultural Seeds," which gives "a table of standing of seed dealers." Obviously such a table, published and distributed, is a direct recommendation of certain seed dealers over others within and without the state.

A clipping sheet entitled "Better Iowa" says "the average Iowa farmer can increase his corn yield from 3 to 4 bus. an acre, his small grain crops from 4 to 8 bus. . . . merely by the use of specific dust seed preparations now available." Following a number of statements about how the dust treatment prevents disease by destroying organisms and the tremendous losses in yield due to disease, comes the recommendation of the specific products of favored manufacturers.

Direct recommendation by College authorities cannot help but reflect upon the unbiased attitude which is supposed to be maintained by the educator, and prompts readers to wonder whether he is really working in the interests of the public or the maker of the special product recommended.

Probably the Eastern Federation points its finger at the seat of the trouble when it calls attention to lack of teeth in the laws creating the educators' positions, and asks correction of the laws, with teeth, in the form of "a fine and/or imprisonment and/or removal from such position" of violators. The Federation deserves the backing of every public spirited citizen in this buro-ridden land.

Business Relief from Unreasonable Regulations Needed

Congress in seeking to stimulate industry and enterprise by artificial inflation takes the most expensive and the least satisfactory method of relieving the business depression. The many governmental activities in competition with business and the ridiculous and unfair regulations and limitations of business helps to discourage all business. It is not the proper province of government to engage in any business activity and the fewer picayunish regulations handicapping business, the sooner will business be able to get back on its feet and function normally.

Governmental attempts to regulate wages of railway employees and rates for transportation have almost deprived the carriers of their right to conduct their own business. The government's operation of barge lines at great expense to taxpayers seldom proves satisfactory to shippers, although it deprives carriers of considerable business. The Farm Board's lending of money at less than current rates of interest and financing so-called co-operative enterprises in many different lines of business, has not proved helpful to producers or consumers.

The perpetual agitators and the salary grabbers alone have profited through the revolving fund of the Farm Board. Their attempts to inspect and regulate the various activities of grain marketing agencies not only require the employment of additional tax eaters but so increases the cost of doing business by real handlers of grain as to force an additional expense upon the agricultural producers. When the farmers come to a true understanding of who is paying most of the bills incurred as the result of the government's interference with the marketing agencies long utilized by producers, they will of their own accord demand hands off, because they are suffering greater loss from political interference with their markets than anyone else.

If Congress would repeal half of the unfair restrictions now barring the way to business

HOW DID YOU FIGHT AND WHY?

Did you tackle that trouble that came your way
With a resolute heart and cheerful?
Or hide your face from the light of day
With a craven soul and fearful?
Oh, a trouble's a ton, or a trouble's an ounce,
Or a trouble is what you make it,
And it isn't the fact that you're hurt that counts,
But only how did you take it?

You are beaten to earth? Well, well, what's that?
Come up with a smiling face!
It's nothing against you to fall down flat,
But to lie there—that's disgrace.
The harder you're thrown, why the higher you bounce,
Be proud of your blackened eye!
It isn't the fact that you're licked that counts;
It's how did you fight and why?

Edmund Vance Cooke.

progress, refinancing corporations and other legislation designed to stimulate business would not even be considered.

Hoarding

Hoarding of over a billion dollars by persons who have lost confidence in banks and investment securities has cut down the circulating medium, closed many banks and materially diminished the bank credit available for constructive activities. To draw the hoards out of hiding places into banks and government securities the President has started an Anti-Hoarding Campaign which will have the endorsement of all but a few misers who gloat over their gold.

Hoarding, however, is not confined to money. During the war, famine-fearful persons hoarded foodstuffs. Hoarding, even now, is practiced by the United States Government thru its Federal Farm Board. It has accumulated 180,000,000 bus. of wheat.

If hoarding of money is an evil what can be said of the hoarding of wheat? Is not the hoarding of wheat productive of more and greater evils than the hoarding of money? The hoarder of gold does not lose by shrinkage of his principal or by deterioration as does the hoarder of grain, who finds himself poorer month by month thru the accrual of interest and storage charges. The Farm Board paid \$1.17 for its hoard of wheat, now valued at 60 cents, and the charges amount to 32 cents per bushel. Knowing that this hoard of wheat may be loosed upon them at any time buyers have remained out of the market, which reached its all time low price last fall. Thus the hoarding of wheat has ruined the farmer's market, and he is so poverty-stricken that the government must rush to his aid with loans for live stock, and seed.

Hoarding of wheat by the government has deprived our brokers, bankers, exporters, export vessel agents and sea ports of a vast amount of business.

Hoarding of wheat by the government has even led to hoarding of money by many individuals who fear eventual collapse of our monetary system as the result of government engaging in the wheat and cotton business.

Hoarding of wheat is indefensible on economic grounds, for a new crop comes to increase the stock annually, and wheat is harvested in some part of the world every month in the year. Hoarded wheat coming onto the market in a year of scarcity would prevent the growers from obtaining the higher prices properly due them to make good for the fewer bushels they have to sell.

Hoarding of cotton with aid of government loans has carried the same menace to the planters of the South, who have seen their mainstay drop in price from 17 to 7 cents under the beneficent (?) influence of the all powerful Farm Board.

Let the government itself set an impressive example by stopping its own hoarding of wheat and cotton.

The Elevator "M" Whitewash

Loading dirt and trash in the bottom of a car and covering it with good grain is a crime in every state of the Union except Minnesota.

The governor of the state exonerated everybody concerned in the Elevator "M" scandal. Even the accuser was credited with good faith in making the charges, the governor found, adding that they were brot on the accuser's own initiative, thereby cancelling the allegation that the Chamber of Commerce was back of the prosecution.

The charge by the Federal Grain Supervision in letters to the Farmers Union that the plugging looked like an effort to sell screenings at the price of corn must have irritated the state executive, for he launches into a lengthy denunciation of the Federal grading system as a smoke screen to hide his retirement from the field of battle.

Condemnation of the practice of mixing and fanning wheat to make higher grades has always been the stock in trade of agitators in the Northwest. Mixing of grain by the owner thereof has always been considered legitimate, and the trade is glad to have the governor's belated indorsement of the practice.

The Coming Inflation

Fluctuations in price have no terror for the dealer in grain accustomed as he is to the daily rise and fall of the markets, and the prospect of inflation of the currency has for him no threat.

As long as he is handling a commodity that can be balanced by daily hedging sales it is immaterial to him whether prices rise or fall. When, however, he must make a long time investment, as in a building for the storage of grain, the prospect of a rise in the price of materials becomes important.

Instead of balancing the budget by cutting the cost of misgovernment the administration seems deliberately to have chosen to inflate the currency. It has the power to do so. The beginning has been made by reducing the New York rediscount rate to 3 per cent.

Until March 3, 1933, member banks of the Federal Reserve system may rediscount paper not previously eligible. All but 62 of the 7,600 member banks will have new credit channels opened to them. The secretary of the treasury estimates a theoretical credit expansion of \$10,000,000,000, and an additional expansion of \$3,500,000,000 in the currency.

All the foregoing is without considering the possibility of the United States slipping off the gold standard and measuring its commodities in depreciated currency.

The obvious policy to meet this situation as it develops is to contract now for all new construction that may be needed for two years to come. It should be safe to incur heavy indebtedness in order to buy now and later pay the indebtedness with inflated currency.

Unauthorized Future Trades Not Chargeable to Shipper

The Patton-Kjose Co., defendant, in 1929 was engaged in the grain business with offices at Great Falls, Spokane and Minneapolis. In May defendant acquired an elevator at Chester, Mont., and agreed to sell it to plaintiff, R. L. Whorley, one of its buyers.

The defendant was to finance plaintiff's operations, handle all commission business, keep his books at the Great Falls office, allow him all profit on grain bought, and charge or credit interest on monthly balances, as such balances showed a debit or credit, and "when the elevator is paid for, the debt then will be transferred to your account."

Plaintiff's earnings exceeded the cost price of the elevator, but defendant, without the knowledge or consent and without authority from plaintiff, used these earnings in speculation and confessed to him that it thus lost him money and so much of its own that it was no longer able to finance him.

Whorley brot suit for an accounting, and the Supreme Court of Montana on Oct. 21, 1931, decided in his favor, saying:

Because of Whorley's inability to comply with the demand of holders of storage receipts, the Grain Marketing Division of the Department of Agriculture took possession on May 19, disposed of the grain on hand, and settled with such holders. Plaintiff remained in possession of the elevator.

Audit shows a profit on the business of handling actual grain, in the sum of \$15,980.93, but, by treating the deals in futures as chargeable to the account of "grain purchased and sold," the loss on the exchange wipes out the profit and leaves plaintiff indebted to defendant in the sum of \$2,907.74. Plaintiff characterizes the segregated items as gambling transactions, while defendant contends that they were legitimate "hedges" for plaintiff's protection, taken with his knowledge and consent and under his express authorization.

As plaintiff sought an accounting in the matter of a legitimate business and contended that the deals in futures were gambling transactions had aside from that business, while defendant also sought an accounting but insisted that the segregated items were properly chargeable therein, it would seem that, under the above rules, if plaintiff's characterization of the deals is found correct, he should prevail even though it appears that he had full knowledge of the transactions and authorized them.

So long as the options or contracts were held, it might be said that they compensated sales of stored wheat, but in February defendant closed out all of its contracts and sold short 3,000 bushels; it then held no contracts for the protection of stored wheat sold. Thereafter defendant purchased wheat contracts for future delivery far in excess of all stored wheat sold. In no case did the "close out" bear any relation to demand for redelivery of stored wheat. No purchase was made because of danger of loss between the time of the actual purchase of wheat and time of delivery, as shown by plaintiff's testimony or that of the defendant's chief witness, Patton, on his direct examination.

In a court of equity it must be assumed that legal title vested in Whorley at the latest on March 31, 1930, when his profit balance exceeded the full purchase price of the elevator. Thereafter the defendant could no more defeat specific performance of the executed contract by securing the agreement of May 1, on a misrepresentation of the condition of Whorley's credit account, that it could re-enter and retake possession and declare all payments forfeited under the forfeiture clause of the contract. From March 31 on, defendant was but the involuntary trustee of the title for the benefit of plaintiff (sections 7886 and 7887, Rev. Codes 1921), and its failure to convey title constitutes a breach of trust, and it cannot be heard to say in a court of equity that it has evaded the consequences of its delinquency because, under the circumstances noted, it secured plaintiff's signature to the relinquishment of rights which had already become fixed, but of which he was kept in ignorance.—9 Pac. Rep. (2d) 210.

Asked — Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

Judgment Against Farm Tenant?

Grain & Feed Journals: I have a judgment against a tenant for grain sold but not delivered. When is a judgment outlawed in Illinois?—Grain Buyer.

Ans.: If the judgment was given by a justice of the peace the limit is 5 years; if in a court of record 20 years, in Illinois.

Information on Operation of Bids and Offers

Grain & Feed Journals: Where can I obtain information as to the operation of bids and offers in the Board of Trade markets?—C. C. Willis, Vega, Tex.

Ans.: A booklet explaining the operation of privileges is sent gratis on application to the author, O. S. Nickels, Chicago, Ill.

Arrest of Defaulting Tenant?

Grain & Feed Journals: I would like to have the name and address of the grain buyer at Estherville, Ia., who in 1931 caused the arrest of a tenant who had swindled him in 1925 by obtaining an advance of \$100 on corn to be hauled "next week," but which was already heavily mortgaged.

I have a somewhat similar deal myself on which I would like to get action.—A. Grinder, prop. White Earth Grain Co., White Earth, N. D.

Sale of Grain by Former Owner of Land?

Grain & Feed Journals: We bought some grain from a party that we supposed owned the farm that he lived on, but later let it go back to the party that held the mortgage. Now they want us to pay for it again. Do we have to pay again?—Ryan & Harms, Sioux Rapids, Ia.

Ans.: The mortgage covers the land; and, by its terms, may have covered also the crops, in which case the grower can not give grain dealer buying the crop a good title as against mortgagee. A mortgage on the land only conveys no title to the crops, and the dealer can not be forced to pay twice. A question arises whether the farmer surrendered possession of the land to the mortgagee and continued on the farm as a tenant, in which case the landlord's lien law would apply.

Before settling with the mortgagee the grain buyer should ascertain the facts regarding the status of the farmer occupying the farm and harvesting the crops. If there was no lease as landlord and tenant, and no foreclosure or surrender of possession the grain buyer is not liable to the mortgagee.

The Supreme Court of Kansas, in *Myers v. Steele*, 158 Pac. 660, held: "A sale made by the lawful occupant of land, which had been sold on execution, of a crop of corn which he had grown thereon, passes a good title as against the grantee, under the sheriff's deed, provided that, at the expiration of the period allowed for redemption, it is ripe in the sense that it has ceased to draw sustenance from the soil, notwithstanding it is not then fit to husk and put in a crib or to market."

Pusa 111, an Indian wheat grown at Pusa and Sind during the 1929-30 season, was found equivalent to good Manitoba in milling quality, giving a high yield of flour of the hard wheat flour type, high protein and remarkably low ash contents, according to tests reported by F. J. F. Shaw, reporting in the *Indian Journal of Agricultural Science*.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other fellows from the field of daily strife and to be convinced that the much maligned horns are truly mythical. You can not afford to pass up these opportunities.

Mar. 17. Oregon Feed Dealers Ass'n, Corvallis, Ore.

Mar. 24-25. Farmers Co-op. Grain Dealers Ass'n of Oklahoma, Enid, Okla.

Mar. 28-30. Society of Grain Elevator Superintendents of North America at Sherman Hotel, Chicago, Ill.

Apr. 22-23. California Hay, Grain & Feed Dealers Ass'n at Los Angeles, Cal.

Apr. 27-28. Illinois Community Feed & Grinders Ass'n, Peoria, Ill.

May 10-11. Western Grain & Feed Dealer's Ass'n, Martin Hotel, Sioux City, Ia.

May 10-11. Illinois Grain Dealers Ass'n, Danville, Ill.

May 31-June 1. Pacific States Seedsmen Ass'n, San Francisco, Cal.

June 16-18. Southern Seedsmen Ass'n at Atlanta, Ga.

June 20. Farm & Grass Seed Group, A. S. T. A., Chicago, Ill.

June 21-23. American Seed Trade Ass'n, Sherman Hotel, Chicago, Ill.

Sept. 19-21. Grain & Feed Dealers National Ass'n, West Baden Springs Hotel, West Baden, Ind.

Quaker Oats Co. net income for 1931 was \$6,856,592, against \$6,003,860 in 1930. The higher earning power from operations last year was despite increased tariffs in more than forty countries and a heavy shrinkage in the tonnage on live stock and poultry feeds.

Garnet wheat was lower in protein and baking quality than corresponding samples of Marquis, grown on adjacent plots at the Saskatchewan station in 1927, 1928, and 1929. The difference in protein content was greatest when weather conditions favored high yields, little difference was shown when the two varieties were grown under dry conditions. Marquis and Reward were decidedly superior to Garnet in many tests, according to R. K. Larmour.

Fire and Dust Explosion Puts the Kansas-Missouri Elevator Out of Commission

The complete destruction of the wooden working house of the Kansas-Missouri Elevator at Kansas City, Mo., recently together with the wrecking of all the mechanical equipment in the concrete working house adjacent, put out of commission temporarily the entire house which is now operated by the Hall-Baker Grain Co., a subsidiary of the Farmers National Grain Corp. The plant has storage room for 5,632,750 bus. of wheat made up of the old wooden workhouse which, as is shown by illustration on outside front cover, was completely destroyed. It had storage room for approximately 245,000 bus. The reinforced concrete workhouse 4 feet from and over towering it has storage room for 185,000 bushels.

In 1904, a single row of 10 large cylindrical concrete tanks were added giving the plant additional storage for 825,000 bus.

In 1914, 40 cylindrical bins and 19 interstice bins were added, increasing the storage room by 1,099,150 bus.

In 1916, another concrete storage unit was added consisting of three rows of 13 cylindrical tanks each, 24 interstice bins and 28 pocket bins, giving additional storage room for 1,027,100 bus.

Last summer the demand for storage room was so urgent that another storage annex, the largest to be built for this plant was erected for the Missouri-Pacific by Edwin Ahlskog, who designed it. This 1931 addition is composed of 81 cylindrical tanks, arranged in 9 rows of 9 tanks each, and each tank is 18' in diameter. This addition also includes 64 interstice bins and 16 pocket bins along the north and south sides of the cylindrical bins. The 1931 addition gave additional storage room of 2,251,500 bus. Two 42" instore belts carry grain from the bin floor of the concrete workhouse to the 1916 storage annex and on through it to the 1931 annex. Four 42" conveyor belts carried grain from the bin floor of the wooden workhouse to the bin floor of the 1916 storage annex and on through it to the bin floor of the 1931 annex. One of the 4 instore belts was near enough to the concrete working house to receive grain directly from two scales in this house and all four belts could receive grain from the cross conveyor belt on its bin floor.

Grain was taken from the bins of these two annexes by means of two 36" and one 42" out of store conveyor belts through basement to the boots of the wooden working house. Two 42" conveyor belts in basement under these two annexes were equipped to take grain from either annex to concrete working house, and a 36" conveyor belt in the basement of the 1916 annex was also so placed as to take grain from the two pocket



The Wooden Workhouse of the Kansas-Missouri Elevator at Kansas City which was Destroyed by Fire and Dust Explosion is Shown between Concrete Workhouse and Drier House.

bins and the three cylindrical bins on the west of this annex to boots in the concrete working house.

The fire raged with great fury following the dust explosion in the wooden working house and melted the window glass and formed icicles of the electric light bulbs on some floors of the concrete working house. The heat was so intense that it destroyed a considerable part of the mechanical equipment and the grain contained in its bins was badly damaged by fire and water. The leg casings of the fire proof working house are being re-equipped and will soon be in a position to turn over the grain in the remaining working house and in the first row of tanks and pocket bins of the 1916 storage annex.

The salvage of the wooden working house was immediately loaded into gondola cars and dumped. The grain in the concrete working house and the concrete tanks adjacent, will no doubt, be salvaged without so much loss. The grain in the other three storage annexes was not damaged.

Plans for the erection of a modern reinforced concrete extension of the existing concrete working house are rapidly nearing completion and, no doubt, contracts will soon be let for its erection. It is intended to make the handling facilities of the rebuilt plant as rapid as possible, in order to serve the four large storage bins. Not only will additional receiving pits be provided in the new track shed but a car dumper of modern design will also be provided, so that when completed, the rebuilt plant will have not only rapid handling facilities but large storage room.

One notable fact in conjunction with this fire and dust explosion is that the fire started thirty minutes before the explosion occurred. All of the elevator employees were out of the building, but the firemen had arrived and were actively engaged in fighting the fire when the explosion killed three of their number and seriously injured eight others.

The force of the dust explosion was confined to the wooden working house and although it was connected directly with the annex on the north by conveyor galleries, the explosion did not extend to the storage units. In-store belts passed thru conveyor galleries equipped with automatic cut offs which were closed by the fusing of the links holding them open. The passage ways between the two working houses were closed by double fire doors held open by fusible links, but all these openings were closed dur-

ing the fire and the sweeping down of the inside walls of the concrete working house after the fire disclosed the fact that some dust was still clinging to those walls, hence the explosion did not extend to the concrete house on any floor. The automatic cutoffs and fire doors were equal to the work assigned them.

Accounting Practice and Credit Policies

By HARRY HIESER, Accountant

Accounting methods among farmers elevators improve a little each year. Probably 95 per cent of the companies now use standard systems and keep them more up to date than ever before.

PATRONS ACCOUNTS IMPORTANT: Each section of the ledger should be balanced monthly. This is especially true regarding patrons' accounts. A customer when settling resents any comebacks like forgotten postings or corrections after he has considered his account settled. Such unpleasantries can be avoided by continually keeping the patrons accounts in balance with the control account.

CREDIT POLICIES: Many companies have been in a quandary as to what the remedy should be in the demands for extension of credit. In a number of instances where a rigid credit plan was adopted a substantial decrease in the notes payable was made which in turn reduced the interest costs and a loss on bad accounts.

In some instances, due to the times, the tendency was to show leniency in the extension of credit which caused the farmer to hold his grain for a higher price. This worked a hardship on both the customer and the company. It is apparent that the most serviceable elevator company is the one which has a rigid credit policy and stands on a non-grain storing policy thereby putting cash in the farmers hands at time of delivery and making it possible for the elevator company to either merchandise the grain at time of purchase or place a consistent hedge for future delivery when the position of the market justifies. We came across one definite example where an attempt was made to help the patrons. The grain some time back was considered below cost of production. Grain was taken in and stored for an indefinite period. More grain was received than

the elevator would hold. Some of the grain was shipped out and the future bought in its place. Indebtedness was reduced and some money advanced on the stored grain. Hedges were carefully watched and under unusual circumstances the company's margin was kept intact but the decline in the market resulted in a loss to the patron. This company now has a large notes receivable burden due to advances on grain and the farmer will be obliged to resort to some of his new crop to meet the advances made to him.

Another company in our clientele stores grain for an indefinite period and charges storage for such so-called accommodations. We found a number of deliveries completely consumed by storage charges.

In contrast to the two above mentioned stations we audited another company that is on a strictly merchandising basis. This company paid for all grain as delivered and was in a position to pay a dividend of $\frac{1}{2}$ cent per bu. on the entire turnover for the year.

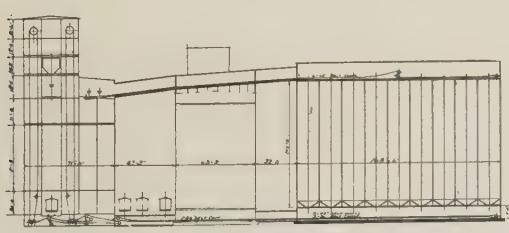
A recapitulation of auditing reports from 40 average companies covering activities for the calendar year of 1931, compared with the same period, 1930, evolves interesting comparisons. Capital stock has remained about stationary, but there is a decrease in the surplus due to paying dividends out of prior earnings. The decrease in net worth corresponds with the decrease in surplus.

The bushel turnover in 1931 was smaller due to a short crop in 1930, with no carry-over, plus the tendency to hold the 1931 corn crop.

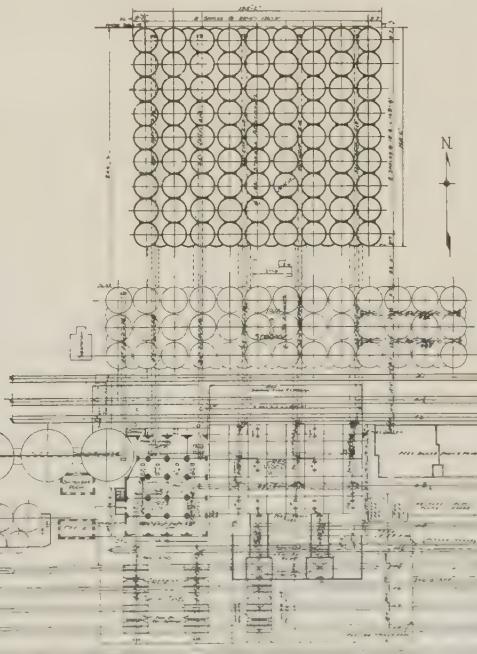
A decrease in merchandise sales attests to reduced farm purchasing power. A decrease in grain sales of \$86,142 is evident as the average for the elevators covered. Yet out of the 40 elevators covered 23 show a profit averaging \$415 compared with \$177 in 1930.

A bright spot is receivables. There has been a tendency to convert open accounts into notes whenever collection was impossible. Notes receivable show an increase and the open accounts show a decrease. But the decrease in open accounts is greater than the increase in notes, which shows that the managers have been successful in collection efforts in spite of low grain prices.

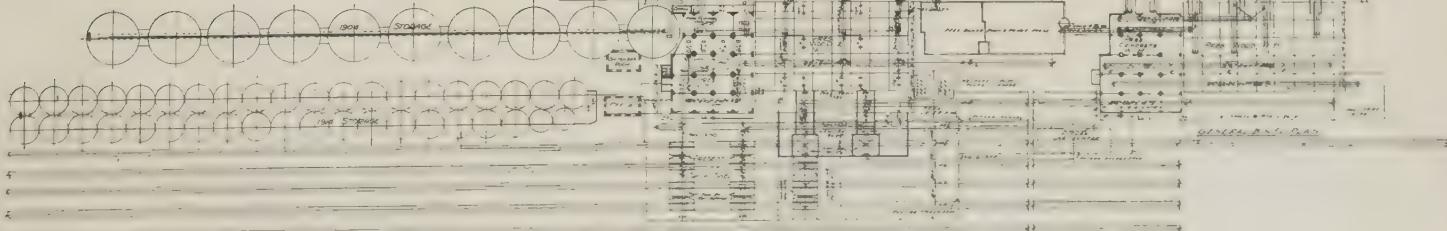
Local newspapers are often well-read and make good advertising mediums for the grain and feed dealer with something to sell.



GENERAL CROSS SECTION



GENERAL GROUND PLAN



Cross Section, Ground Plan and Bin Plan of the Kansas-Missouri Elevator at Kansas City.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

Government Wheat Depressing the Market

Grain & Feed Journals: Surely the growers must soon come to realize that the large stocks of Farm Board wheat are depressing the market prices of all grains and until this surplus is taken out of the public show windows, the farmers cannot get enough for their products to pay for much more than their actual living expenses. All luxuries will continue beyond their buying power.—G. R. Strickland, Los Angeles, Cal.

Farmers Disgusted With Farm Board

Grain & Feed Journals: It has become pretty thoroly understood here in the mid-west that the farm board has practically destroyed the farm co-operative institutions and the vast amount of money it has squandered in enormous salaries, storage commissions and other indefensible overhead instead of benefitting the farm industry has simply placed more tax burden upon it and destroyed its former markets. To say that farmers of Nebraska and neighboring states are disgusted with the farm board wild catery is putting it mildly. They are mad and hoping for a glorious opportunity this year to unloose some of their anger at the ballot box.—E. C. Witham, Lincoln, Neb.

Taxation and Government in Business

Grain & Feed Journals: An ominous storm is gathering over this tax question. With values of everything we own or produce deflated to a remarkable degree and incomes greatly reduced or wiped out during the past two years, taxes have remained stationary or have been increased. For instance, farms selling for 3 to 4 hundred dollars an acre a few years ago and taxed at \$300.00 to \$400.00 per quarter section, are now selling under mortgage for \$85.00 to \$150.00 per acre and taxes are still at the high figure.

As usual the governing bodies had to be knocked over the head with a billion dollar deficiency for 1931 before they recognized the situation. The best they can promise us now for 1932 is a further two billion dollar deficiency with a great increase of taxes to balance the budget by 1934. With this enormous increase facing us and with six million people out of work visitors to Washington, D. C., report a saturnalia of spending of government funds in that city. Great buildings are being torn out and new ones costing many millions going up in their stead to carry out a style of architecture that shall be harmonious and imposing.

While the representatives of 19 state organizations are searching for new and painless plans for raising money by taxation, let them concentrate on real worth while reduction in the costs of the state government. We have had a lot of futile gestures towards economy but no substantial relief. The state of Nebraska budget for 1931-1932 is \$13,413,000.00 and the actual appropriation for the biennium were \$14,523,000.00 which is almost twice what they were during the war period.—J. N. Campbell, sec'y Nebraska Grain Dealers Ass'n, Omaha, Neb.

Legislation for Vicious Minorities

Grain & Feed Journals: If Congress heeds the request of the Farm Buro Federation with its membership of only one per cent of the entire farm population it should bear in mind that these requests do not represent the membership as a whole, since the ordinary numbers have no voice as to what should be asked of the government.

Because other industries run to the government for help one per cent of the farm population thinks they should do likewise, but two wrongs never made one right.

Instead of appealing to the government those who do not like the grain business should try farming. If that does not suit try dry cleaning, laundries, railroads or the packing business, letting supply and demand regulate the number we need in each industry. Think of the grain speculator as your brother, as there is need for him. He carries the risks of ownership.—Edgar W. Block, Indianola, Ill.

Future Trading Market Protects Profit of Cash Grain Dealers

Grain & Feed Journals: Farmer sells 1,000 bus. wheat at 40c and delivers. Elevator buys 1,000 bus. at 40c and ships. Elevator sells 1,000 bus. option at 44c. The 1,000 bus. cash wheat arrives and sells at 44c. Elevator buys 1,000 bus. option at 44c. Elevator pays commission company \$2.50 for handling two transactions. The 1,000 bus. cash sold for 4c profit to elevator, less \$2.50 for hedge, or a net of \$37.50.

Leaving freight, handling, and insurance (determinable factors) out of the picture, suppose cash wheat went down 4c—the elevator would still make its \$37.50 on option and break even on cash. Again, suppose wheat went up 4c, the elevator would lose \$42.50 on option and gain \$80.00 on cash, or a net of \$37.50. This is what the present day marketing practice does for the country elevator. It makes grain buying a sure shot business.

The criticism has been made that an operator can sell short. Yes, he can; but for every short sale there must be a long buyer, the transaction is not complete until the short seller has bought back or delivered, and the long buyer has sold out or received the grain.

The mills are the ultimate purchasers of the wheat. They anticipate their requirements for the next 30 days, and place an order for 10,000 bus. at 44c. To protect themselves they also sell 10,000 bus. at 44c. Now then, the 10,000 bus. that they bought at 44c is delivered and the option is bought back at 44c. If wheat goes up they have gained on their cash and lost on the option, or vice versa. The commission house stands between and keeps the accounts balanced for $\frac{1}{4}$ cent per bus. for each completed transaction.

Without the commission merchant there, what would we have? The country elevator would buy the wheat at its source and take its loss or gain while the wheat was in transit. If he sold on track the mills would take a loss or gain while the wheat was in transit. There would be a real element of gambling in this arrangement, while the present system of options is a sure shot.

Now then, suppose we peg the price of wheat at \$1.00 per bus. and take only what wheat we need and let the farmer keep the surplus. This would be all O. K. if the whole world could peg at \$1.00; but the costs of producing a bushel of wheat vary so greatly in the different parts of the world, and the world markets are made in Liverpool.

Where then, did the Federal Farm Board hope to improve the marketing situation? They hoped to purchase enough wheat to catch the shorts short and then sell them the wheat. They did not, and apparently could not, purchase sufficient amounts. THE WORLD GLUT OF WHEAT WAS TOO IMMENSE. The plan may have worked during a time of war or pestilence, but not during a time of world production.—George Swanson, Mankato, Minn.

Government Destroys Farmer's Market and Grain Merchant's Business

Grain & Feed Journals: After 50 years in the grain business I concluded to retire two years ago, as I could see no future for my firm, most of my customers having gone into the Farmers National Co-operative.

It looks to me like the Farm Board and its subsidiaries are here to stay, and one after another the grain men will have to go, as I did. They have my sympathy.

The farmer needs buyers and the more buyers the better for him and the grain dealer. Millers, exporters and speculators are the three best buyers; and the speculator is the man who bulls the market when he thinks the price is too low. Now on account of the large stocks accumulated by the Farm Board we have no speculators who are willing to bull the wheat market. With the new wheat crop coming on I see nothing in sight that will help the farmer to get better prices.

If our exporters, instead of the Farm Board, had had our wheat they would have disposed of it at some price.

Before prohibition my firm sold large lots of barley to the Anheuser-Busch Brewing Co. and the Lemp Brewing Co., a trade that we lost, and the farmer had to quit growing barley as there was not much demand for it. They tell the farmer he grows too much wheat; but what should he grow on his land? The farmer knows best for he gets the markets and can grow what pays best. I hope the prosperity that we all are looking for will come in 1932.—Henry Foell, St. Louis, Mo.

Wheat Pool certificates are worth 34 per cent of their face value, according to J. Wesson, vice pres. of the Pool, who expects legislation enabling the Saskatchewan Pool to make payment of the balance due on the 1928 crop at $1\frac{1}{8}$ cents a bushel. Pooling is surely profitable to the promoters.

The functioning of the Federal Farm Board in the Cache Valley was bitterly attacked by Ephraim Bergeson, former pres. of the Utah State Farm Buro, declaring that the grain growers had been given "no consideration" in that section and that the national corporation had been consistently paying several cents a bushel less than independent dealers.

The Federal Farm Board is a costly lemon. The farmers never wanted the Farm Board, they never asked for it. What has been done to the farmers over and over again is to give them what somebody else thought would be good for them, not what they asked for. One of the evils of the Farm Board has been the tendency to freeze out old line farmer co-operatives, which have been established for years.—Governor Gifford Pinchot of Pennsylvania.

Statutory Liens on Grain

By ELMER NAFZIGER, Springfield, Ill.

The manager of an elevator in buying grain and making payment therefor should bear in mind at all times two Illinois acts with respect to liens, the landlord's lien law and the thresherman's lien law.

The first landlord's lien law passed in Illinois was approved on Feb. 16, 1865. Since that date certain changes have been made and the law now in force on this subject is as follows:

"Every landlord shall have a lien upon the crops grown or growing upon the demised premises for the rent thereof, whether the same is payable wholly or in part in money or specific articles of property or products of the premises, or labor, and also for the faithful performance of the terms of the lease. Such lien shall continue for the period of six months after the expiration of the term for which the premises are demised, and may be enforced by distraint as in this Act provided."

The word "lien" has been defined as a right in one man to retain that which is in his possession belonging to another until certain demands of the person in possession are satisfied. It signifies an obligation, tie or claim annexed to or attached upon property which must be satisfied before such property can be demanded by its owner. In a narrow sense, the term "lien" implies a right of one in possession of personality to hold it as against its owner for the satisfaction of a claim due from the owner. It is neither a right of property in the thing nor a right of action for the thing. It is simply a right of detainer. A lien, in its proper legal sense, imports that one is in the possession of the property of another and that he detains it as security for some demand which he has in respect of it.

At common law, possession was essential to the creation and preservation of a lien. A lien was a mode of enforcing satisfaction by the mere passive holding of the creditor. The creditor thus prevented the debtor from deriving any benefit from his own until he paid the debt he owed in respect of the property. The mechanic had the right to retain in his possession a machine which he had repaired until his bill for making the repairs had been satisfied. The carrier had the right to retain goods carried by it until its transportation charges had been paid.

New liens have been provided by statute. Many of the statutory liens differ from the liens recognized at common law in that possession is not required to sustain them. The protection offered at common law by possession is in the case of many statutory liens afforded by some form of recorded notice. For instance, we have a statute which gives one who furnishes material for a building a lien on the property of which the building is a part for the sale price of the material. In the absence of a waiver or payment, this statute continues the lien in force for four (4) months without recording, and upon filing notice within the four (4) months' period in the manner provided by the statute, the lien may be continued for a longer time. The theory of the law with respect to notice in this case being that an examination of the building will reveal recent changes or additions, in which event a prospective purchaser or mortgagee is bound to ascertain whether all charges therefor have been paid while protection against unpaid amounts for more remote changes or additions is afforded by the notice required by the statute.

The Present Landlord's Lien Law enlarges the common law powers and rights of the landlord and must be strictly construed. Ordinarily the landlord does not have possession of the crop upon which the lien is given. His claim for rent is made by the statute to attach or tie to the crops grown or growing upon the rented premises. The landlord's lien is secret in the sense that it is unknown by any public record or by any evidence of possession. The lien given by the statute does not invest the landlord with either title to or the right to possession of the crops grown or growing upon the demised premises. The legal title and right of possession are in the tenant, subject to being taken away by appropriate proceedings to enforce the lien of the landlord. The lien is limited to the crops grown or growing upon the leased premises and does not extend to other property of the tenant.

The landlord's lien attaches from the time of the commencement of the growth of the crop whether the rent is then due or not. It is a paramount lien which can be lost only by waiver or failure to enforce at the proper time. It is superior to the lien of a subsequent chattel mortgage. It is created by

law and from its very nature and under the statute it must have precedence unless it has been waived or the landlord has been guilty of laches.

The landlord's lien is upon the crops grown or growing upon the demised premises in any year for the rent which shall accrue for that year. It does not include rent which may be due for previous years. It is not confined to any particular crop but embraces all the crops, or any portion of them. If, for instance, a lease provides for payment of cash rent for pasture land and one-half of the grain raised upon the rest of the premises and the tenant raises a crop of oats and corn but fails to pay the cash rent and the rent on the oats, a lien for all of the rent due, if not lost or waived thru negligence of the landlord, attaches or ties to the corn grown upon the premises and will be payable therefrom.

Warning to Buyer.—One who purchases grain from a tenant, knowing the fact of such tenancy and that the grain was raised on rented premises, is put upon inquiry as to the existence and extent of the landlord's lien for unpaid rent. The burden in such case is placed upon the purchaser before buying the grain to exercise reasonable diligence in ascertaining whether the lien has been discharged. The law does not impose upon the landlord the duty of notifying the purchaser that the rent is unpaid.

If a tenant sells grain grown upon leased premises to two or three different purchasers, each purchaser knowing that the grain purchased was grown upon leased premises, the landlord has the right to sue any or all the parties and to pursue his remedy until his claim is satisfied not exceeding, however, in his recovery against any purchaser the market value of the crops purchased by him. A purchaser of grain grown by a tenant upon which the landlord has a lien, with knowledge that the grain was raised upon rented premises, will be liable to the landlord for the rent due to the extent of the value of the grain purchased.

Buyer Without Notice Not Liable.—On the other hand, the purchaser of grain without notice that it was raised on rented premises or without notice of facts sufficient to put such purchaser on inquiry will not be liable to the landlord for its value.

In purchasing grain from a tenant, the purchaser cannot safely rely on representations made by the tenant that the lien for rent has been discharged but such purchaser should make inquiry of the landlord or the landlord's authorized agent in order to relieve himself of liability to the landlord.

In every case in which the landlord seeks to enforce his lien for rent against the purchaser, it should first be determined whether the purchaser knew that the grain was raised on rented premises or knew of facts which were sufficient to put him on inquiry. If the purchaser bought the grain without knowing it was grown on leased land or without having any reason for suspecting it may have been grown on leased land, he will not be liable to the landlord for the rent. If, however, the purchaser knew that the grain was raised on leased premises or knew of facts sufficient to put him on inquiry, he will be liable to the landlord for unpaid rent while the latter's lien is in force unless he is able to show that the landlord has waived his lien. In addition to an express waiver, the landlord may by his conduct waive his lien, as for example, if, in prior years, the landlord had agreed that the tenant had authority to sell the grain clear of his lien and had done this for such a number of times or under such circumstances as to lead the ordinary person to believe that he meant to waive his right to enforce his landlord's lien in the future as well as at the times it was waived, the purchaser, upon a trial to enforce the lien, would be permitted to introduce evidence of these facts and the court would instruct the jury to decide from such evidence whether the landlord had waived his lien.

In order to guard against loss arising under the landlord's lien act, the local elevator man in purchasing grain should ascertain if the grain was grown on leased premises and whenever he finds that such is the case he must satisfy himself that the landlord's lien has been discharged or waived.

The Thresherman's Lien Law is of much more recent origin than the landlord's lien law. The first thresherman's lien law was passed in 1927, and the law now in force on this subject is as follows:

"Every person who, as owner or lessee of any threshing machine, clover huller, corn

sheller or hay baler, threshes grain or seed, hulls clover, shells corn or presses hay or straw at the request of the owner, reputed owner, authorized agent of the owner or lawful possessor of such crops shall have a lien upon such crops, beginning at the date of the commencement of such threshing, hulling, shelling or baling, for the agreed contract price of the job, or, in the absence of a contract price, for the reasonable value of the services or labor furnished. Such lien shall run for a period of (8) eight months after the completion of such services or labor notwithstanding the fact that the possession of the crops has been surrendered to its owner or lawful possessor, provided that such lien shall not be valid and enforceable against a purchaser of said crops from the owner or lawful possessor thereof unless the lien holder shall, previous to or at the time of making final settlement for such crops by such purchaser, serve upon such purchaser a notice in writing of the existence of such lien."

To date this act has not been passed upon or construed by either our Appellate or Supreme Court. In the event of a dispute between a tenant, a landlord and a thresherman, or any two such persons, as to their rights and priorities, the elevator man should not assume the responsibility for passing upon these claims, but in all such cases where he is unable to get the various parties to agree among themselves he should file a bill of inter-pleader as to the amount in dispute, and in and by this bill offer to pay the amount in dispute into the court for the benefit of the person or persons who may finally be found to be entitled to the same.

Paint for Elevator Signs

By I. L. SEARS

Black automobile enamel is one kind of paint that will stay put on galvanized iron, so a 13-year test of a sign painted on the side of a galvanized-iron-covered grain elevator has proved.

The process in painting the sign was as follows: The short corrugated iron sheets were cleaned with gasoline and laid on a clean floor, lapped as they would be when nailed to the side of the elevator. The lettering was laid out in pencil by means of paper templates of the letters. The outlines were filled in with three coats of good grade automobile enamel each coat of the enamel being allowed to dry thoroly. The completed sign was then nailed in place on the space left on the side of the new elevator.

The paint has lost its gloss but it is yet black and covers the iron with no scaled spots.

Oklahoma A. & M. College compilations estimate rats do \$4,000,000 damage annually in that state. Almost enough to pay for the depredations of politicians, at least a small group of them.

The Service of Unrestricted Speculation

SPECULATION also serves as a regulator of consumption, a matter of prime importance to both producers and consumers. Each crop should pertain essentially to itself, and should not unduly overlap the next year's crop. Speculation constantly concerns itself with this important problem, and the rate of consumption is essentially bound up with the price of the commodity.

In the event of a great shortage, a rise in price, all other factors being equal, will retard consumption and thus make the commodity last to the end of the season. But in the event of a bumper crop, a declining price will hasten consumption and substantially clean up surplus stocks by the time the next crop matures. But for such regulation of consumption we must have a free speculative market. To "peg" prices artificially high in any country, through governmental interference or otherwise, clearly out of line with the world price, is bound to retard consumption. — Professor S. S. Huebner.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Baltimore, Md.—Wheat receipts in Baltimore in February totaled 972,595 bus., compared with 716,190 bus. in the corresponding month last year.—R. C. N.

Washington, D. C.—Commercial wheat stocks in store and afloat at United States markets Feb. 27 were 216,284,000 bus., against 214,804,000 the preceding week and 208,651,000 bus. a year ago.—U. S. Dept. of Agriculture.

Creighton, Neb., Mar. 2.—Are shipping grain in here. It was dry last summer. About 100 cars of grain and hay together shipped in. Business quiet in all lines.—Mann Oil Co., Louis Mann, mgr.

Manitowoc, Wis., Feb. 25.—More than 300 cars of Government grain stored in Elevators "A" and "B" of the Bartlett Frazier Co. here are to be moved toward the eastern seaboard at once, it is reported, destined for Buffalo, Philadelphia and other eastern points.

Decatur, Ill., Feb. 27.—We are inclined to believe that the distress corn that is going to come on the market at present prices will move during the next two weeks. After that time the corn in producers' hands will be carried over until later in the season, unless prices advance. March 1st farm reserves will be ample.—H. I. Baldwin & Co.

Kansas City, Mo.—More wheat was received the past month at this city than in any preceding February, arrivals having been 7,606 cars, against 4,238 in February, 1931, and 2,787 in February, 1930. The largest February receipts previously were 5,658 cars of wheat in 1922. Receipts of corn were the smallest on record, at 513 cars, against the maximum of 4,921 cars in February, 1928.

Washington, D. C.—The surplus for export and carry-over as of February 1 is approximately 427 million bus. compared with 357 million a year earlier. Allowing for a "normal minimum" carry-over of 125 million bus. would leave a surplus of 302 million bus. available for export as of February 1 this year compared with 227 million a year ago. It is to be borne in mind, of course, that this surplus nominally available for export is not all available in the current year. Such amounts as the Grain Stabilization Corporation is committed to continue to hold on June 30 can hardly be considered a part of the surplus available for export during the current season.—U. S. Dept. of Agriculture.

Madison, Wis., Mar. 1.—Supplies of feed on Wisconsin farms are much smaller than a year ago. Stocks of corn, oats, and wheat on Wisconsin farms are nearly 30% smaller than last year. About 51% of the corn which was harvested for grain in 1931 or 11,200,000 bus. was still on the farms at the beginning of the year. This represents a decline of 19% from the 13,800,000 bus. on farms a year earlier. Farm holdings of oats in Wisconsin totaled 41,800,000 bus. as compared with 62,200,000 bus. on Jan. 1, 1931, a decline of 33%. Wheat stocks consisting of 900,000 bus. were 34% below 1931 supplies.—Federal-State Crop Reporting Service for Wis.

Winnipeg, Man., Feb. 27.—Total deliveries of new wheat to date in the three Prairie Provinces, 202,830,000 bus.; allowance for seed, feed and country mills, 55,000,000 bus.; estimated by elevator agents in farmers' hands to market, 28,149,500 bus. Coarse grains inspected to date: Oats 19,349,800 bus., barley 6,280,000, rye 894,900, flax 835,500. In store at country points: Oats 6,700,000 bus., barley 3,000,000, rye 1,850,000, flax 925,000. Estimated by country elevator agents in farmers' hands to market: Oats 17,721,200 bus., barley 3,937,600, rye 1,185,800, flax 263,200.—Northwest Grain Dealers Ass'n, J. G. Fraser, mgr.

Large Stocks of Corn

Chicago, Ill., Mar. 2.—March 1 stocks of corn remaining on farms are relatively large, our reports indicating that 45.1 per cent of the crop, or 1,152,000,000 bus., were still held, the ten-year average holdings being 39.7 per cent of production. This is the reverse of a year ago when holdings were unusually low.

The disappearance of corn on farms from Nov. 1 to March 1, four months, was 1,496,000,000 bus., which compares with 1,428,000,000 in like period a year ago (a short crop), but with 1,767,000,000 bus., the average for the preceding five years.

The number of corn-consuming units of live stock on farms on Jan. 1 was about 2.3 per cent more than the year before. Supplies of corn are above average in the southern states and east of the Mississippi River, but small in the northwest, where crop production was short.

The unusually mild weather all winter over the entire corn belt undoubtedly was an important factor in saving of feed.—Nat C. Murray, statistician Clement, Curtis & Co.

Stocks on Farms

Chicago, Ill., Mar. 1.—Corn: Stocks on farms are estimated at 1,078,640,000. The proportion of the crop remaining on farms is estimated at 42.2%, compared with 34.1% last year; 37.8% in 1930; 38.7% 1925-1929 5-year average and 39.7% 1920-1929 10-year average. Illinois reports the largest percentage of the crop still in farmers' hands. Ohio and Indiana also report a large percentage of crop still on farms.

Wheat: Stocks on farms are estimated at 162,855,000 bushels. Last year we estimated the stocks on farms on March 1st at 133,000,000 bus. The proportion of crop remaining on farms this year is estimated at 18.3% compared with 18.8% (Govt.) in 1931; 15.9% in 1930; 15.0% 1925-1929 5-year average and 17.0% 1920-1929 10-year average.

Oats: Stocks on farms are estimated at 323,965,000. The proportion of crop remaining on farms is estimated at 29.2% compared with 33.6% in 1931 and 32.9% in 1930.

Barley: Stocks on farms are estimated at 32,438,000. The proportion of the crop remaining on farms is estimated at 16.2%, compared with 26.3% in 1931 and 24.0% in 1930. Reports indicate comparatively heavy feeding of barley.—E. H. Miller, statistician Jas. E. Bennett & Co.

Pres. Hoover has asked Congress for an appropriation of \$1,450,000 to fight an anticipated invasion of western states by grasshoppers. The Bureau of Entomology would expend the appropriation in Colorado, Iowa, Minnesota, Montana, Nebraska, North and South Dakota, and Wyoming. With an appropriation available there is no doubt it would be spent.

Farm Stocks of Wheat Large

Chicago, Ill., Mar. 2.—Farm consumption of corn has been about 150,000,000 bus. less than the average of recent years due to a mild winter and substitution of wheat for feeding purposes in districts where the corn crop was short and wheat supplies plentiful and cheap. Present farm stocks are very short in the north half of Iowa, and in South Dakota and Nebraska, and much larger than last year in the surplus territory east of the Mississippi river.

Farm stocks of wheat are the largest at this date since 1921 and has been exceeded but four times in forty years. Analysis of local reports indicates a moderately larger amount of farm feeding of wheat than last year, in part due to pasturing of fields, where part of the acreage was not worth cost of binding. There appears available on March 1 approximately 563 million bus., which would provide 406 million for exports from March 1 to July 1 and carryover stocks at the close of June, an amount liberally in excess of last year. Part of this increase is due to smaller requirements for the seeding of a reduced acreage and to what appears as a rather sharp reduction in bread consumption.

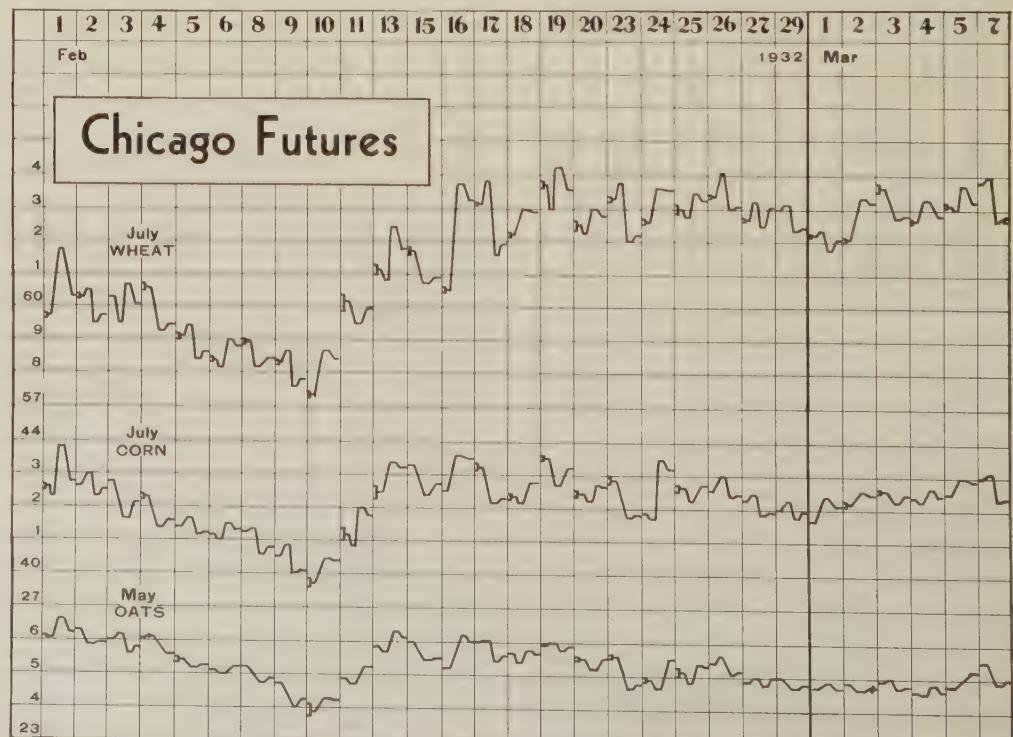
In addition to the amount apparently on hand in this country, some 14 million bus. officially reported as exported is actually held in Canada in storage, thus really adding that much to the surplus of United States wheat available for consumptive purposes.—B. W. Snow, Bartlett-Frazier Co.

Wheat Movement in February

Receipts and shipments of wheat at the various markets during February, compared with February, 1931, in bushels, were:

	Receipts 1932	Shipments 1932	Receipts 1931	Shipments 1931
Chicago	1,250,000	2,875,000	457,000	604,000
Duluth	214,960	5,080,755	518,055	298,081
Fort William	1,922,120	4,525,231	7,402	101,702
Fort Worth	1,026,200	866,600	414,400	400,400
Hutchinson	5,097,400	3,461,400	.....	.....
Indianapolis	461,000	281,000	224,000	218,000
Kansas City	12,169,600	6,780,800	2,815,435	4,228,630
Louisville	336,000	106,500	97,500	192,000
Los Angeles	463,400	442,400	.....	.....
Milwaukee	25,040	557,480	32,550	72,850
Minneapolis	2,767,590	8,047,570	1,462,930	3,103,660
New Orleans	447,359	4,192	559,093	116,955
New York	2,859,400	.....	321,600	.....
Omaha	2,502,400	3,200,000	1,337,000	2,913,400
Peoria	210,000	283,200	261,600	133,200
Philadelphia	1,057,688	877,075	15,986	747,904
St. Joseph	388,800	624,000	560,000	880,500
Seattle	1,590,400	676,200	.....	.....
Superior	300,651	3,013,278	170,860	290,229
Toledo	1,958,980	464,800	862,680	127,630
Wichita	2,799,000	1,785,000	1,825,500	1,533,000

The soybean was known in China over 5,000 years ago.



Farm Corn Distribution

Chicago, Ill., Mar. 1.—The estimated supply of corn on farms March 1 is 1,010,000,000 bus. or 39.5% of the crop, compared to 704,000,000 bus. last year or 34.1% of the crop. The 5-year average supply is 1,051,000,000 bu. or 38.7% of the 5-year average crop.

Wheat supply on farms March 1 is estimated at 182,600,000 bus. or 20.4% of the crop compared to 161,400,000 bus. last year or 18.8% of the crop. The 5-year average March reserve is 125,000,000 bus. or 15% of the crop. The amount of wheat in country mills and elevators is estimated at 69,300,000 bus. compared to 82,800,000 last year and a 5-year average of 84,500,000. The estimated amount of wheat in city mills is 79,000,000 bus. compared to 68,000,000 last year and 75,000,000 the 5-year average.

Farm reserves of oats are estimated at 411,000,000 bus. or 37% of the crop compared to 429,616,000 last year or 33.6%. The 5-year average supply is 480,000,000 bus. or 35.0%.

Farm reserves of rye are estimated at 4,600,000 bu. compared to 10,100,000 last year and the 5-year average of 6,949,000.—R. O. Cromwell, statistician Lamson Bros. & Co.

Sac County, Ia., raises more popcorn than any other U. S. county; a lot of it is raised in adjoining counties. Nebraska ranks second among the states as a popcorn producer.

Linseed Oil may have a strong competitor in china wood oil, hitherto imported from China, as experimental groves of the tung tree have proved successful in Florida, the oil being pressed out of the nuts. The first tank car shipment of tung oil produced in America was made recently from Gainesville, Fla., to Carteret, N. J. Over 500,000 trees have been planted, the production being about 30 pounds of oil per tree. China wood oil is valuable in paints, lacquers and varnishes.

Rye Movement in February

Receipts and shipments of rye at the various markets during February, compared with February, 1931, in bushels, were:

	Receipts	Shipments		
	1932	1931	1932	1931
Chicago	46,000	17,000	23,000	606,000
Duluth	41,377	26,147	8,010	230,343
Fort William	51,893	69,509	.....	.....
Ft. Worth	1,500	.....	.....	.....
Indianapolis	1,500	4,500	1,500	3,000
Kansas City	18,000	18,000	10,500	10,500
Louisville	6,000	15,000	4,500	10,500
Milwaukee	4,380	17,500	6,100	12,200
Minneapolis	218,400	205,420	127,840	279,260
New Orleans	.....	.....	.....	3,000
New York	27,200	.....	.....	.....
Omaha	5,600	18,200	9,800	15,400
Peoria	.....	395,800	1,200	2,400
Philadelphia	.....	.....	.....	.....
Seattle	1,500	1,500	.....	.....
Superior	31,119	10,772	5,755	105,813
Toledo	238,240	1,200	238,085	3,000

Barley Movement in February

Receipts and shipments of barley at the various markets during February, compared with February, 1931, in bushels, were:

	Receipts	Shipments		
	1932	1931	1932	1931
Chicago	322,000	112,000	56,000	250,000
Duluth	.....	31,223	.....	5,133
Fort William	63,627	81,265	2,300	8,119
Ft. Worth	54,400	11,200	4,800	9,600
Hutchinson	1,600	8,000	.....	.....
Kansas City	32,000	67,200	36,800	144,000
Louisville	2,000	2,000	.....	.....
Los Angeles	140,800	225,600	.....	.....
Milwaukee	454,860	607,160	226,300	204,600
Minneapolis	445,600	878,510	617,760	985,640
New Orleans	.....	1,600	.....	.....
New York	30,600	.....	.....	.....
Omaha	16,000	14,400	11,200	17,600
Peoria	351,800	278,000	30,800	111,600
Philadelphia	1,460	2,741	.....	.....
Portland, Ore.	.....	8,750	.....	7,000
St. Joseph	17,690	22,400	.....	.....
Seattle	.....	8,921	.....	.....
Superior	8,400	2,400	1,250	.....
Toledo	.....	15,600	.....	10,400
Wichita	.....	.....	.....	.....

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

Springfield, Ill., Mar. 2.—Winter wheat continues in generally good condition. Some farmers are plowing. February terminates the warmest winter in Springfield's 58 years of record; also the season of least snowfall to date.—Clarence J. Root, Meteorologist, U. S. Dept. of Ag.

Winnipeg, Man.—The value of the wheat produced in the three Prairie Provinces decreased to \$99,090,000 in 1931 from \$157,378,000 in the preceding year; oats to \$33,170,000 from \$41,135,000 in 1930, and barley to \$9,616,000 from \$16,019,000 in 1930, according to the Dominion Bureau of Statistics.

Oklahoma City, Okla., Feb. 25.—Condition of winter wheat is generally very good, except fair to good in the extreme northwestern part of the state, where additional soil moisture is generally needed. Other winter grains have made only fair progress because of deficient sunshine and cold, wet soil. Some oats have been sown and are coming up, but the bulk of the crop will be planted later than usual.—Weekly Okla. Bulletin.

Chicago, Ill., Mar. 2.—The condition of winter wheat on Mar. 1 (or the last week of February) was about 81.5 per cent of normal, which is a little higher than the condition on last December 1, but is still below average. In the great plains area (western Kansas and Nebraska, eastern Colorado, and northwest Oklahoma and Texas), where the condition was very low last December 1, the condition remains low. In nearly all other parts of the winter wheat belt the condition is average or better.—Nat C. Murray, statistician Clement, Curtis & Co.

Chicago, Ill., Mar. 2.—Condition of winter wheat is generally good from central Kansas eastward, except in some far eastern sections. Winter growth of top foliage which usually withers to the ground during the jointing period, has had unusual growth and may cause the fields in some sections to present an unhealthy yellowish tinge if the joint period is delayed by cool, cloudy weather. About 4,500,000 acres in western Kansas and vicinity is showing rather badly, from which sections condition tapers off to better to the east and south consisting of about 3 million additional acres that are classed from poor to fair. Much is not yet over the ground and what top growth is showing is of a weak spindly appearance, being far from enough to shade the ground effectively against damaging spring dust storms.—H. C. Donovan, statistician, Logan & Bryan.

Oats Movement in February

Receipts and shipments of oats at the various markets during February, compared with February, 1931, in bushels, were:

	Receipts	Shipments		
	1932	1931	1932	1931
Chicago	1,800,000	888,000	370,000	1,324,000
Duluth	2,310	150,844	2,000	49,348
Fort William	75,265	225,080	132,977	316,266
Fort Worth	244,000	74,000	68,000	36,000
Hutchinson	.....	8,000	.....	.....
Indianapolis	888,000	606,000	964,000	970,000
Kansas City	268,000	312,000	110,000	198,000
Los Angeles	56,000	24,000	.....	.....
Louisville	282,000	462,000	308,000	564,000
Milwaukee	186,960	122,145	124,000	207,500
Minneapolis	374,520	1,119,160	230,660	2,536,460
New Orleans	70,000	38,000	20,217	16,027
New York	96,800	.....	3,000	.....
Omaha	52,000	444,000	50,000	380,000
Peoria	272,400	286,600	271,800	376,200
Philadelphia	36,156	7,593	14,000	.....
St. Joseph	924,000	356,000	14,000	112,000
Seattle	30,000	16,000	.....	.....
Superior	11,801	50,024	5,869	88,688
Toledo	379,250	658,075	176,075	470,500
Wichita	12,000	55,500	9,000	51,000

Decatur, Ill., Feb. 27—The mild warm days have made the wheat plant look fine; one might expect to find such a condition in April rather than in February. No damage has been reported; believe it will take several weeks of growing weather to determine if freezing and thawing damaged wheat to any extent.—H. I. Baldwin & Co.

Los Angeles, Calif., Feb. 25.—On a recent drive to San Francisco and Stockton, returning via the San Joaquin Valley, I found a wonderful stand of small grain, but the straw is short, as a direct result of cold weather which has greatly retarded the growth and development of the plants. Judging from the information I collected from different dealers along the way, the wheat acreage is about 10% less than last year, the barley acreage is normal and the oats acreage will be larger than usual. The production will not net farmers enough extra grain to effect a material increase in their income, unless we have a marked advance in prices.—G. R. Strickland.

Sioux City, Ia., Mar. 3.—There has been an abundance of snow during the winter thruout this section of Iowa, Nebraska and South Dakota. Winter wheat was well protected with this blanket of snow and for this reason there is not much chance of any winter kill. The recent mild weather has melted the snow in a gradual manner and this moisture will place the soil in excellent shape for the spring work. A deficiency of moisture during the past two years resulted in a practical crop failure last year thruout a large part of this territory. Indications are that there will be sufficient moisture this season to insure a normal crop.—Bob Swensen, with James E. Bennett & Co.

Burocrats Give Bad Advice

W. F. Jensen, sec'y of the American Ass'n of Creamery Butter Manufacturers, writes:

Two years ago, at our annual convention, I called attention to the danger resting in the advice coming from Washington that farmers should reduce their acreage in wheat and cotton, and I stated that if the farmers followed this advice they would give more attention to milk cows and increase the number of same.

This situation is developing and is real, and I call your attention to the increase in butter made in December of this year in three typical cotton states—Oklahoma 61%, Mississippi 31%, Texas 29%; while in two typical wheat states, North Dakota shows an increase of 39% and Kansas an increase of 16% for December, in comparison with a year ago.

I still believe it would be better to develop foreign markets for surpluses of wheat and cotton than to decrease the acreage devoted to same, with the consequences of an increase in the production and a weaker market for dairy and poultry products, for which no foreign markets can be found.

The annual farm value of dairy and poultry products in the United States is at least four times that of wheat and four times that of cotton.

Corn Movement in February

Receipts and shipments of corn at the various markets during February, compared with February, 1931, in bushels, were:

	Receipts	Shipments		
	1932	1931	1932	1931
Chicago	6,150,000	5,588,000	576,000	1,320,000
Duluth	3,000	15,568	1,500	.....
Fort William	.....	.....	12,784	.....
Fort Worth	303,000	327,000	18,000	57,000
Hutchinson	123,000	300,000	.....	.....
Indianapolis	1,330,500	2,334,000	498,000	1,354,000
Kansas City	769,500	3,340,500	63,000	2,140,500
Louisville	279,000	474,000	153,000	255,000
Los Angeles	421,500	304,500	.....	.....
Milwaukee	627,290	956,080	191,125	525,587
Minneapolis	532,690	1,033,250	277,950	1,491,480
New Orleans	481,422	22,500	28,902	34,997
New York	41,765	.....	.....	.....
Omaha	424,200	2,370,200	183,400	1,912,400
Peoria	1,426,600	1,585,650	522,350	1,029,600
Philadelphia	12,747	4,800	.....	.....
St. Joseph	361,500	1,603,500	135,000	889,500
Seattle	82,500	108,000	.....	.....
Superior	6,873	8,615	.....	.....
Toledo	423,750	78,750	110,695	3,850
Wichita	15,600	253,500	1,300	157,300

Indiana Farmers Elevators Oppose Restrictions on Futures Markets

Opposition to any changes in the Grain Futures Marketing Act, or further legislation for restricting futures trading was strongly expressed at the 17th annual convention of the Indiana Farmers Grain Dealers Ass'n, meeting at the Fowler Hotel, Lafayette, Ind., Feb. 25-26. In line with this sentiment was a definite demand for reduced taxes thru elimination of bureos, commissions, boards and individual offices that bear no direct relation to the functions of government.

Thursday Morning Session

PRES. WM. STEPHENSON, Muncie, presided at the 1st session, which was opened with community singing.

Invocation was pronounced by E. G. McCollum, Indianapolis.

MAYOR JOHN B. HUDSON extended a hearty welcome, calling attention to features of interest about the city.

Walter Penrod, Medaryville, responded for the ass'n.

PRES. STEPHENSON made his annual address, lauding association with fellows in the same line of endeavor, and the exchange of ideas, as the sound purpose and the greatest benefit of an ass'n. Coming together, mutually studying problems, putting forth effort to the best of individual ability, he looked upon as part of the answer to prosperity for the farmers.

SEC'Y L. R. RUMSYRE, So. Whitley, read the minutes of the last meeting, which were approved.

Pres. Stephenson appointed the following com'ites:

CREDENTIALS: Wm. F. Hagen, Chalmers; Royal D. Clapp, Raber.

RESOLUTIONS: Walter Penrod, Medaryville; H. O. Rice, Huntington; R. O. Naylor, Modoc.

NOMINATIONS: Matthew Maroney, Lucerne; E. L. Miller, Lafayette; Geo. Hensley, Yorktown.

Adjournded to 1:30 p. m.

Managers Session Thursday Afternoon

EVERETT McVICKER, Van Buren, pres. of the Managers Ass'n, was chairman of the Managers' session, held Thursday afternoon.

E. D. GADBURY, Matthews, sec'y, gave a brief resume of the finances and membership, and the minutes of last year's meeting.

R. D. MACDANIEL, director of field service for the Grain Dealers National Mutual Fire Insurance Co., discussed the portable feed mill situation in Indiana, calling attention to the effects of portable competition, portable operating costs, means of combating the machines. His address was published on page 100, Jan. 27 number, and page 154, of the Feb. 10 number, Grain & Feed Journals.

FRED SALE, Indianapolis, Sec'y Indiana Grain Dealers Ass'n, reported briefly on efforts to get reduced power rates. Responses have been courteous, he said, but it takes time to make adjustments. Reference was made to the difference in costs of operation between diesel and steam engines compared with electricity. Electric power rates increased the cost 3 times over diesel or steam power.

F. W. MOONEY, Wabash, auditor, discussed "Sidelines as a Source of Profit," saying:

LOCALLY GROUNDED FEEDS LEAD AS SIDELINE

In handling sidelines the quality of merchandise should be considered in relation to the customers who will purchase it. High quality merchandise, offered to a trade that counts its pennies first and buys on a price basis will eat itself up in inventories. Turn-over counts in making a profit, and the profit from sidelines ought at least bear the expenses of operation, so that the grain profits can pay dividends.

The average gross profit on sidelines runs about 10%. If much credit is extended it ought to exceed this figure or loss is liable to occur. Out of a total of 12 companies audited last year the average gross profit on sidelines was 11.8%.

Locally compounded commercial feeds lead as the most popular side line for farmers elevators. They use experiment station and college formulas and find ready sale, partly because of the price factor. Commercial feeds manufactured at centralized points are usually more expensive. Many elevators have installed mixers to increase this business.

A wide difference exists among elevator managers on the merits of handling coal. Both quality and price are important factors in its sale. Most elevators seek to handle what the people want.

Seed is an important sideline, but does not command the interest it deserves. Twine and fertilizer follow in importance.

The cash basis has much to recommend it, enabling the elevator manager to increase his turn-over and sell on lower margins.

HEDGING OPERATIONS

PROF. A. F. HINRICHES, Purdue University, gave an explanation of hedging, advocating this as a means of distributing risk, shifting it to shoulders best able to carry it. Future trading he looked upon as legitimate speculation.

Reporting on 62 companies, 26 showed a gross loss thru hedging operations, 26 showed a gain of from 1 to 4 cents a bu., 10 showed a gross gain of 2 to 5 cents.

Farmers elevators do not take advantage of hedging facilities as do regular elevators. About 41% of them have rules in their by-laws prohibiting it; 25.3% don't believe in it; 5.7% have no understanding of it. In the majority of cases where practiced about 68%, good carrying charges are earned thru hedging operations.

COLLECTING ACCOUNTS

WALTER PENROD, Medaryville, talked on collecting accounts with interest, declaring it a big and difficult subject, with no shining examples which could be singled out. To some patrons credit is a blessing, to others a curse. The primary fault with the credit system is laxity on the part of elevator managers.

Managers dislike to refuse credit to stockholders or influential directors. In one case where an elevator had \$6,500 on the books and it was ordered collected, the 7 directors owed 60% of it. Loose credit has caused more elevators to close their doors than any other single factor.

Where a credit business is done it is necessary to impress every customer with his obligations. Impose 30 day limits and stick to them. If a customer is delinquent find out when he can pay and then expect payment. If a customer's credit is shaky expect him to pay for the last purchase before you give him another.

Sending out monthly statements helps collections. Adding a percentage for interest on slow accounts speeds up payments. Sometimes more drastic measures must be taken, like sending out the truck after a load of grain. In taking such measures the likely effect on the individual must be considered.

The cash basis comes the nearest to being trouble free. But if it is started there should be no weakening. It is easy for a cash store to slip into extensions of credit.

CASH AND CARRY

LEE CARL, Remington, discussed the cash and carry policy which has been instituted by so many of the Indiana elevators handling sidelines and attempting to operate on a sound merchandising basis. His company had \$21,000 on the books when it decided to go on a cash basis. Measures were taken by advertising the intent, which promised better service at lower prices. Customers understood the intent before they were asked to pay cash. Meanwhile outstanding accounts were collected so far as possible.

For a time the company kept in close touch with banking facilities, but for the past 8 years it has not found borrowing necessary. Customers who want credit are sent to the bank to borrow money necessary for purchases.

There were plenty of temptations to extend some credit to individuals. The company disregarded them, persisted in its cash and carry policy. Some trade was lost for a time, but in the end it came back and brought more with it.

Adjourned to Friday morning.

Banquet

An excellent dinner was served delegates at the 6:30 p. m. banquet Thursday. Entertainment consisted of talented singers and a 3-act comedy entitled "Just Country Folks."

Friday Morning Session

Pres. Stephenson presided at the 3rd session, held Friday morning.

DR. E. C. YOUNG, Purdue University, talked on "Why the Depression and When We Will Get Out," calling attention to the relation of money and credit to present difficulties, to contributing inflations, and the headaches that must follow.

T. R. CAIN, Jacksonville, Ill., pres. of the Illinois Farmers Grain Dealers Ass'n, extended greetings from Illinois, and referred to the grading troubles with yellow hard wheat (Grain & Feed Journals, Feb. 24, page 181).

R. I. MANSFIELD, Chicago, talked on "Taxes and Hard Times," describing the growth of bureaucracies, the tremendous increases in the tax burden which they have brought, the dictatorship of politicians, restrictions on production, trade, commerce. Politics he looked upon as one of the foundation troubles of business today, creating uncertainty and fear in investors and business leaders. He repeated many of the arguments which have been published under his name in Grain and Feed Journals from time to time during the past year.

F. D. BERNARD, Muncie, banker, gave an explanation of the Reconstruction Bill.

Adjourned to Friday afternoon.

Friday Afternoon Session

Pres. Stephenson presided over the 4th session.

SEC'Y RUMSYRE, So. Whitley, reported that his office is now in shape so it is ready to take care of claims for the membership.

THE RESOLUTIONS COM'ITE reported the following resolutions, which were adopted:

Resolutions Adopted

Oppose Futures Market Restrictions

WHEREAS, various agencies and individuals are attempting to legislate additional restrictions upon the grain futures market, and

WHEREAS, such legislation at this time would further disrupt and demoralize the present organizations of marketing, therefore, be it

RESOLVED, that this convention go on record as opposing any drastic changes in the present Grain Futures Marketing Act.

Oppose Restrictions on Corn Sugar

RESOLVED, that we protest against any restrictions on the manufacture and sale of corn sugar in any form that is salable.

Demand Reduced Taxes

WHEREAS, the taxes of our country are exorbitant and there is an immediate need for reduction of said taxes, and

WHEREAS, there are many Bureaus, Commissions, Committees, and individual offices that could be eliminated without hindrance to the functions of our Government, therefore, be it

RESOLVED, that this convention go on record as asking for a reduction in the said number of Bureaus, etc., that are overlapping in their efforts and are unnecessary as a part of our Government, and that we favor a reduction in the use of the taxing power and a greater use of the pruning knife as a means of balancing our Federal and State budgets.

M. P. HILL, chairman of the location com'ite, recommended the next convention be held Feb. 23-24, 1933, at Purdue University, where convention accommodations were promised, the dates to be tentative until it should be known they would not interfere with other conventions. Support of his recommendation being offered by representation from the University, vote of the membership was favorable.

SEC'Y RUMSYRE made his annual field report, saying:

Sec'y Rumsyre's Report

On Feb. 26 last year the Board of Directors of the Indiana Farmers Grain Dealers Ass'n decided to divorce the commercial activities of the organization from the duties of the sec'y, and appointed me part time sec'y for the Ass'n.

Following a conference with former sec'y E. G. McCollum plans were made for the Indiana Farmers Co-operative Elevator Co. to take over the assets and liabilities of this ass'n in exchange for the ass'n's moral support. These plans met with the approval of both Boards of Directors concerned and with the creditors.

Electron of a number of new directors and a new sec'y at the last meeting made it necessary to formulate and adopt policies on which all agreed. Copies of these were mailed to all farmers elevators in the state. They demonstrated that the new officers and directors stood for the sound principles of the farmer owned and farmer controlled organization.

Fifty-three delegates responded to a called meeting of the membership held at Muncie on Oct. 17 last, at which a state-wide effort to secure lower electric power rates was organized.

Our records show 40 paid members for the year of 1931; the final count for 1930 was 42. We lost 11 members and gained 9 new ones.

Farmers Elevators Obstructed: As an observer I feel that the farmers elevator movement has been obstructed and hindered by many other movements that caused the farmers to concentrate their minds on too many different marketing ideas. The U. S. Grain Growers, arising in the west, and offering national salvation to the farmers, was one of the first to side-track the stock holders of farmers elevator companies. There followed the Farmers Union; then the Wheat Pool, supported by the Indiana Farm Buro, a powerful organization that helped shove down the throats of the farmers the theory that their only hope of being saved from destruction was signing of the Pool contract and grain marketing under the Pool system. Each came up, like the morning sun, shined for a day, then settled beyond the mist of mysteries, leaving the farmers elevators as the only representation of farmers marketing achievements.

Marketing Act: In its turn has come the Agricultural Marketing Act, built upon the Capper-Volstead Act, founded on theories started by sponsors of like ass'n's that have failed. Why the Capper-Volstead Act was chosen as the foundation is not understand-

able, unless it was to make it utterly impossible for 90 per cent of the farmers elevators to qualify and share in the special privileges and benefits. On passage of the Act we learned that \$500,000,000 was appropriated for starting and assisting cooperative companies that could qualify. This made necessary the appointment of the Farm Board, the 12 members of which steer the activities of the appropriation. Then came the Farmers National Grain Corp., and ways and means were explained whereby farmers elevators could qualify for membership and financial assistance.

I took steps to qualify the Peabody Cooperative Co. for the purpose of getting a loan, but learned that because we handled coal and merchandise and did some credit business we were not eligible.

Further questioning disclosed that a qualifying cooperative company could get loans to set up another elevator next door to an already established farmers elevator if the established elevator would not sell at a satisfactory price.

A short time ago I sent to Washington for a report of the Agriculture Conference and Farm Board Inquiry. After reading it I wonder which is the greatest drain upon the American farmers, the Boards of Trade with magnificent skyscrapers and regular dealers clamoring for the farmers' crops, or this governmental set-up, assembled under the direction of the Farm Board. According to the Inquiry monthly salaries alone paid out by the Farmers National Grain Corp. and its subsidiaries to handle grain, total \$195,789.83, which, multiplied by 12, makes the stupendous total of \$2,349,477.96 per year. These figures seem to demand argument for justification.

County Units: The same consideration should be given the County Unit Plan now proposed by the Indiana Farm Buro. As far as I can learn the purpose of organizing the County Unit Distributing Agency for the Farm Buro in each county is to use the same coercive idea of cooperation that would eventually force the elevators in each county under one head, where they might be dominated by the Farm Buro. The plan appears to be unreasonable additional overhead, and promises to be a failure for several reasons, among which is lack of personal contact by a local manager.

Farmers Oversold: The farmers have been oversold on the possibilities for gain thru cooperative buying and selling. Not enough has been said about farm costs of production. I have seen many farmers drift backwards financially, some losing their homes, because they felt it their duty to do everything demanded of them by the promoters of farm relief movements. Others stayed home, studied their costs on producing a crop of corn, of oats, of wheat, or 100 lbs. of pork, or 100 lbs. of milk. They have made payments on their debts, and in some cases have bought additional pieces of land.

I have no wish to be placed on record as being opposed to any farmer working for the benefit of the industry he represents, but

it does appear that due consideration should be given past failures before acceptance of similar plans are tried. Nothing so answers the farmers' marketing problem as the locally owned, locally controlled farmers elevator.

NEW OFFICERS

Election of officers replaced Wm. Stephen-son, Muncie, as pres.; made John Selmer, Medaryville, 1st vice-pres.; H. O. Rice, Huntington, 2nd vice-pres.; retained Harvey Kreider, So. Whitley, as treas.; elected W. L. Woodfield, Lafayette, a director. Other directors are Samuel Lebo, Winamac; F. E. Dowling, Frankton; Omer Green, Southport, and J. J. Woerner, Rochester.

Adjourned *sine die*.

Government Waste

That the problem of farm surpluses should be intelligently studied and dealt with sincerely with an absence of politics, is the recommendation of Peter B. Carey, president of the Chicago Board of Trade, who says:

The fact that the public pay roll has increased, in the last fifteen years, two and one-half times as fast as our population should be a warning sign that here, indeed, is a detour from the highway which leads to better times.

The Farm Board, naturally, is the most spectacular of all examples of the dissipation of public funds to carry out ill-advised legislation intended to aid or placate the leaders of a group at the expense of taxpayers in general. The way back to prosperity, of course, dictates that all waste of this character be discontinued.

The Farm Board does not stand alone. Many departments, many bureaus, spread tons of comparatively useless literature—representing thousands of hours of painstaking work by thousands of federally paid employees—over the countryside.

Recently, the government printing office advertised for bids for more than 39,000,000 pounds of paper and almost 49,000,000 envelopes. This, if the advertisement was correct, was for a six months' or a year's supply. And it doubtless will be used to continue the cannonading from the bureaus. Some of it may be useful, but most of it cannot be necessary when the way back to prosperity is steep and toilsome.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye and barley for July delivery at following markets for the past two weeks, have been as follows in cents per bushel:

	Feb. 24	Feb. 25	Feb. 26	Feb. 27	Feb. 29	Mar. 1	Mar. 2	Mar. 3	Mar. 4	Mar. 5	Mar. 7	Mar. 8
Chicago	63 1/2	63 3/4	63	63	62 3/4	62	63 1/2	62 3/4	62 3/4	63 1/4	62 5/8	63 1/4
*Winnipeg	61 3/4	62	61 1/2	61 1/2	60 5/8	60 3/4	60 3/4	60 7/8	62	62 3/8	62	62 1/8
*Liverpool	64 3/4	63 1/2	63 1/2	62 1/2	61 1/4	60 7/8	61 1/4	61 1/4	61 1/4	61 1/4	63 1/2	63 3/8
Kansas City	54 3/4	54 3/4	54 1/2	54 1/2	53 7/8	53 1/2	54 1/2	54 1/2	54 1/2	54 1/2	54 1/2	54 1/2
Minneapolis	69 5/8	69 5/8	69 1/2	69 1/2	68 5/8	68 1/2	69 1/2	68 3/4	68 3/4	68 3/4	68 3/4	69 3/8
†Duluth, durum.	68 7/8	68 1/2	68 1/2	68 1/2	67 1/2	67	67 1/2	67 1/2	67 1/2	67 1/2	66 7/8	66 7/8
Omaha	55 1/2	55 3/4	55	55	54 1/2	54	55 1/2	54 1/2	54 1/2	54 1/2	55 3/8	55 3/4
St. Louis	60 5/8	60 5/8	60 1/4	60 3/8	59 3/4	59 1/4	60 3/4	60 3/4	60 3/4	60 3/4	60 3/4	60 3/4
Milwaukee	63 5/8	63 3/8	63	63	62 5/8	62 1/2	63 1/8	63	63	63 3/8	62 3/4	63 1/2
	Wheat											
Chicago	43 7/8	42 5/8	42 3/8	41 7/8	41 1/8	42 1/8	42 3/8	42 1/2	42 3/8	42 7/8	42 3/8	42 5/8
Kansas City	40 5/8	40 1/2	40 1/4	39 3/8	39 1/8	39 3/8	39 1/8	40	40	40 3/8	40	39 7/8
Omaha	39 5/8	39 1/4	39	38 3/8	38 3/8	38 3/8	38 3/8	38 7/8	38 7/8	38 7/8	39 3/8	39
St. Louis	41	40 3/8	40 1/2	40	39 3/4	39 3/8	40	40 1/2	40 1/2	40 1/2	40 3/4	40 3/4
Milwaukee	43 1/8	42 5/8	42 1/2	42	42	42 1/8	42 3/8	42 3/8	42 3/8	42 7/8	42 1/2	42 1/2
	Corn											
Chicago	26	25 3/4	25 5/8	25 3/8	25 1/8	25 3/8	25 3/8	25 1/8	25 1/8	25 5/8	25 5/8	25 3/4
Winnipeg	33 1/4	33 3/8	33 1/8	32 3/4	32 1/2	32 3/8	32 3/8	32 3/4	32 3/4	33	32 3/4	32 7/8
†Minneapolis	25 7/8	25 7/8	25 1/2	25 1/2	25	24 1/2	25 1/2	25	25	25 1/2	25 1/2	25 1/2
Milwaukee	25 5/8	25 5/8	25 3/4	25 3/8	25 1/8	25 1/8	25 1/8	25 1/8	25 1/8	25 1/2	25 1/2	25 1/2
	Oats											
Chicago	48 1/2	48 3/4	49 1/2	49 1/4	48 1/2	49 1/2	50 1/2	50 1/2	50 1/2	51 1/2	51 1/2	52 1/2
†Minneapolis	43 7/8	44	44	44	43 1/2	43 1/2	44 1/2	44 1/2	44 1/2	45 1/2	46 1/2	46 1/2
Winnipeg	49 1/2	49 1/2	50 1/2	50 1/2	50	49 3/4	51 1/2	50 1/2	51 1/2	52 1/2	52 1/2	54 1/2
Duluth	45	45	46 1/4	46 1/2	45 1/4	46	47 1/2	48	48 1/2	49	49 1/2	49 1/2
	Rye											
Chicago	41 1/2	41 5/8	41 5/8	41 5/8	41 1/4	41 1/2	42 1/4	42 1/4	42 1/4	42 3/4	42 1/2	43 3/8
†Minneapolis	42 5/8	42 3/4	42 1/8	42	41 3/8	41 3/4	41 3/4	41 3/4	41 3/4	42 5/8	42 7/8	43 1/2
Winnipeg												
	Barley											
†Minneapolis												

*Deduction made on wheat only for depreciated currency. †May delivery.

World Production and Consumption of Wheat, and Seasonal Movements of the Crop

By NAT C. MURRAY, Chicago

Of the various foodstuffs of the world, wheat is exceeded in volume of production by potatoes and probably rice. Potatoes are bulky and highly perishable, are generally produced near place of consumption, and therefore are less important in national and international commerce than is wheat.

Rice is the staple food of the yellow races, is produced in vast quantities in Asiatic countries where it is also largely consumed, and therefore is of minor importance among the white races, or in international trade.

So, in international trade, wheat is by far the most important of all foodstuffs.

Statistics of world wheat production include production in nearly fifty countries, covering a wide area of the globe.

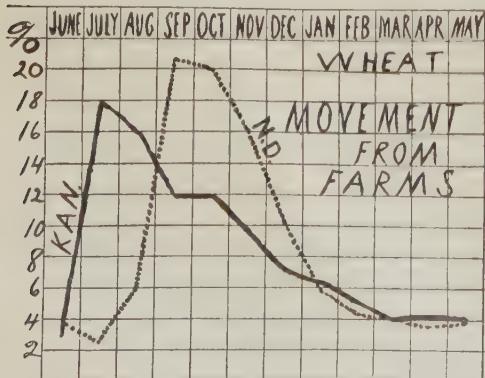
Harvest Time.—Some wheat is harvested in every month of the year. The smallest amount is harvested in late October and early November. Late in November the world harvest season may be said to begin, in Australia and South America, where it enlarges in December and January and practically ends there in February. India then commences, and increases in activity through March and April. In April harvesting operations are in progress in such countries as Persia, Asia Minor, North Africa and Mexico. In May activity is lessened, for then the Indian harvest has been about completed and the harvest season is crossing the Mediterranean from North Africa to Southern Europe, where harvests do not become general until June. In June, July and August about 70 per cent of the world crop is harvested, the season progressing steadily northward during these months, in the heavy producing areas of Europe and America. By September harvest operations are nearly completed, Scotland, Northern Russia and Siberia and Canada having a little left over from August. Very little harvesting is done in October and the early part of November.

Of the total world wheat crop, between 10 and 15 per cent is grown in the Southern Hemisphere, harvested mostly in December and January, and 85 to 90 per cent in the Northern Hemisphere harvested mostly in June, July and August.

Most Wheat Winter Sown.—In the United States roughly two-thirds of the wheat is winter sown and one-third spring sown. In Russia about one-third is winter sown and two-thirds spring sown. In the rest of Europe it is mostly winter wheat, that is, fall sown. Canadian is nearly all spring sown. Approximately 35 to 40 per cent of the total wheat is spring sown and 60 to 65 per cent winter sown.

Of the total world wheat production nearly one-fifth moves from one country to another; that is, the international movement of wheat represents about 20 per cent of the total production. Wheat is essentially a world commodity and the price in any market is normally influenced more by the world supply than by local or nearby production or supply; although in a market like Chicago the price is the resultant of both world and domestic conditions.

In trade statistics much more attention is given to supply and movement than to consumption. This is because supply is quite variable, while consumption demand is very stable. Over a series of years, of course, supply and consumption balance. What I mean by variability of supply and relative stability of consumptive demand is this: On



Farmers market the bulk of their wheat soon after harvest. Kansas farmers market most heavily in July and North Dakota farmers in September and October. Chart based upon ten year average.

the supply side the great variability is illustrated by the statement, that the production of wheat in Kansas last year was nearly 75 million bushels more than the year before—or nearly 50 per cent more; whereas in North Dakota the crop was 65 million bushels less than the year before—or 70 per cent less. Or, that the Canadian crop last year was 100 million bushels less than the year before, whereas, the winter wheat crop of the United States was 185 million bushels more than the year before. Thus by reason of crop failures, or bumper yields, production is constantly shifting around.

The consuming population remains fairly constant; thus the population of Kansas or North Dakota, or of the United States or Canada does not change much from year to year. Not only is the consuming population fairly constant geographically, but the consumptive wants of each individual does not change much from year to year.

The beginning of a crop season in the United States is reckoned as July 1, which is the middle of the calendar year. In many other countries Aug. 1, is regarded as the beginning of a crop season. In the Southern Hemisphere it is Jan. 1. On July 1, commercial stocks and marketings in the United States are usually at or near their lowest level, and begin to increase in July and later months, as harvests, threshing and marketing progresses.

The supplies for any season are regarded as the production of the year plus the stocks on hand in various places July 1, called the carry over. Under normal conditions, of the total United States supply for a season about 85 or 90 per cent represents the crop produced that year and 10 to 15 per cent the carry over.

The world's carry over on July 1, including unmarketed parts of the Southern Hemisphere crop, is thought to be normally about 12 to 15 per cent of a year's production. In other words, the amount of wheat carried over from one year to another is normally enough for only about 6 to 8 weeks' consumption.

At one period of the season, one factor, as for example, crop prospects, is a dominant factor in the market, while at another period, another factor, as the rate of movement to market, may be a dominant.

Before the war there was a fairly stable equilibrium in the world wheat production and distribution. The war upset this equilibrium. Production in the European consuming countries was materially reduced by the war; and Russia, which before the war was the source of one-fourth of the international wheat trade, (being then the largest exporter) dropped out completely for nearly ten years. In the United States farmers were encouraged in 1918 to increase their wheat by a guaranteed price by the government. Production was stimulated in other exporting countries, as Canada, Argentina and Australia. In the past dozen years the world production has been increasing rapidly, the increase from 1917 to 1930 being more than 50 per cent. By 1930 the world wheat acreage, excluding China and Russia, was nearly 50 million acres larger, or about 25 per cent larger than the five-year average before the war. Canada increased her acreage from 10 million before the war, to 25 million acres or 150 per cent. Australian acreage increased from 8 to 18 million acres, that is more than doubled. Argentina increased from 16 to 21 millions and the United States increased its acreage from 47 million to 59 million acres. It may be observed here that the expansion of wheat in the past 10 or 15 years has been greatly facilitated by the introduction of the tractor and the automobile. The displacement of the horse by the automobile has released in this country nearly 15 million acres, previously necessary for the production of horse feed. In the past twenty years, in which the wheat acreage of the United States was increased more than 10 million acres, the area planted to corn was decreased more than five million acres.

By 1923 the deficiencies brought about by the war, were made up; but expansion in production continued. In 1924-25 the Canadian wheat pool began to operate, exerting its influence to hold up prices by holding supplies off the market, without reducing production; in fact, inducing further increase in production.

While exporting countries were thus expanding rapidly, some of the important wheat importing countries tried to discourage the importation of foreign grown wheat by imposing high duties on wheat imports. Thus Germany, which before the war, ad-

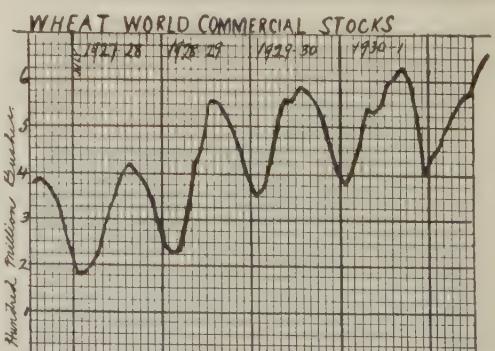
mitted wheat free of duty, now has a duty of \$1.62 per bushel. Italy, which also admitted wheat free of duty before the war, now has a duty of \$1.07 a bushel and France has a duty of 85 cents a bushel. These rates make our import tariff on wheat 42 cents a bushel seem small. In 1926 Russia, which had been out of the wheat export business for nearly ten years, again appeared on the scene as an exporter in a small way, disappeared in 1928 and 1929, only to appear again in 1930 and 1931, in larger volume. For several years after the formation of the Canadian pool, it operated successfully during the early period of rising prices. Canada in the 1928-9 season exported more than 400,000,000 bushels of wheat by far the largest amount ever exported by any country in one season; and the price was remunerative, for there was further expansion of production. By 1928-29 the world supply of wheat began to be burdensome, due both to expansion of production and the accumulation of surplus. In 1929 the farm board was organized and tried by strong arm methods, to maintain prices, which were beginning to slip under the pressure of large supplies. The failure of the farm board to arbitrarily hold up prices is too well known to be dwelt upon here. The depression in business accentuated the decline of wheat prices.

It should be remembered that the demand for wheat does not vary much, with variation in price. The demand is like the demand by a man for a dinner; if he is accustomed to pay 50 cents for his dinner, he may pay \$1.00 rather than go without; but having had his dinner he would not give 10 cents for a second dinner. So it is with the demand for wheat. A supply just a little under the normal demand, will advance the price in greater proportion than the reduction of supply. On the other hand, just a little surplus above this normal demand will depress the price in greater proportion than the excess of supply. This has been the situation in the wheat trade in the past few years.

What is of interest in the world wheat situation at the present time is that the process of readjustment of supply to consumption demand is now going on.

Automatically, by reason of price, the wheat acreage in many countries is being reduced instead of increased. The acreage recently harvested in the Southern Hemisphere was nearly 20 per cent smaller than the acreage of the preceding year. Our winter wheat acreage was reduced more than 10 per cent. The Canadian winter wheat acreage, the small was decreased about 10 per cent; and the acreage of the export countries of Europe, Rumania, Bulgaria, Hungary and Jugoslavia is reduced nearly ten per cent. France, Germany and Italy, the three importing countries, with high tariffs and high domestic prices for wheat, have increased their acreage, but not nearly enough to offset the decreases taking place in the exporting countries. General trends in the world wheat situation change gradually and the present trend to reduce wheat acreage may continue for several years. What will be the trend of prices I shall not venture to forecast.

The Montreal Harbor Commission is defendant in a suit for \$522,230.26 damages brought by the Canadian Co-operative Wheat Producers, Ltd., for excess storage and insurance charges on wheat stored in the harbor elevators in 1928 and 1929. It is alleged that the Harbor Commission loaned the Pool wheat to other persons. What a struggle the poor Wheat Pool is having.



Observe the seasonal changes in monthly world commercial stocks of wheat, being lowest usually in July, rising to about January or February, then declining, although the trend in the past five years has been upward.

Legislation at Washington

The vigorous objections made by the Farmers Elevator State Ass'n of the West to legislative restrictions on our present efficient future trading system have cooled the ardor of the congressmen against the commodity exchanges; and they are shifting their attack to the stock exchange.

The House Com'ite did bring out a draft of a bill to regulate commodity exchanges, but no member of the com'ite had the courage to attach his name to the bill, so it is without name and number, which is unusual. In fact, the grain dealers in Washington never were given an opportunity to read the proposal before they were asked to speak on it; and Geo. H. Davis, vice-chairman of the Grain Com'ite on National Affairs, demanded that the com'ite draft be read. The bill grants the Sec'y of Agriculture unlimited power to cut down the volume of future trading to nothing.

MR. DAVIS explained that if millers stayed in the market at all if the bill were passed they would need a margin of 5@20c per bu. on wheat, because they would be compelled to buy on the open market.

"We must either go out of business or accept the risk of loss in a declining market," he said. "If this bill is passed I wouldn't be surprised to see wheat go down 10@20c per bu., because future buying is holding up the market now."

"No one with less than \$1,000,000 in his business could operate on the market under those conditions. Obviously a miller would need that amount to buy. There probably are not more than four or five grain concerns in Kansas City which have more than \$1,000,000 in capital."

"Leaving with the secretary the power to prescribe the limits of futures trading would be even more disastrous than for congress to fix an arbitrary limit on speculative trading."

"The Kansas City exchange has extended every facility to the farmer co-operatives. Yet they handle only 4 per cent of the grain. If they have a better system it is all right with us, but, meanwhile, you should not destroy the present machinery by which 96 per cent of the farmers' wheat is marketed. The unanimous opinion of the Kansas City and other grain exchanges is that if the proposed legislation is passed curbing further the speculative market, the trade would be driven to Winnipeg, which would be dangerous to the American grower."

PETER B. CAREY, pres. Chicago Board of Trade, said: You might as well close all the grain exchanges in the country if you eliminate short selling. This thing of eliminating the privilege trade has been tried before, but the Supreme Court has held it unconstitutional.

Mr. Carey told the com'ite that President Hoover has failed to furnish him any information as to the chief executive's charge last July that a group of operators was making bear raids on the Chicago grain exchange. Carey explained that he came to see the president and was told that the chief executive had charts and graphs to substantiate his charge, but that the president never had made them available to him.

FRED J. LINGHAM, Lockport, N. Y.; Geo. E. Hinckie, Kansas City; Wm. C. Helm, Minneapolis, and L. N. Perrin, Chicago, representing the largest flour milling interests in North America, led the delegation opposing restrictions on the grain exchanges. They said: Limitations on short sellers of futures would restrict their ability to hedge sales of flour with economy to the buyer of flour and the producer of wheat. That the prohibition of short selling would destroy the ability of mills to hedge. That without normal hedging facilities in futures, the margin of safety in acquiring

wheat against prospective flour sales would have to be widened and that the difference would come out of the returns of the growers of the wheat.

FREDERICK B. WELLS, Minneapolis, said bankers had told him they would withdraw financial support from the market if there were no future trading.

E. F. ROSENBAUM of Chicago sent a telegram opposing the principles of the bill.

The bill authorizing the distribution of 40,000,000 bus. of wheat to the needy was passed by the House Mar. 3, by a vote of 344 to 2, without reimbursement to the Farm Board. In cities of more than 25,000 the wheat must be baked into bread before distribution. Chairman Stone testified that the Stabilization Corporation has 180,000,000 bus. of wheat, representing an investment of \$1.17 per bushel.

A bill prohibiting the sale of Farm Board wheat at less than 81 cents per bushel has been prepared by Senator Gore.

S. J. Res. 112, by Jones, provides that "crop production" in the Reconstruction Finance Corporation Act shall be construed to include summer following during the year 1932 for the 1933 crop.

S. 2493 by Borah provides: That no compensation or salary in excess of \$15,000 a year shall be paid to any person heretofore or hereafter employed by the Federal Farm Board; nor shall the Federal Farm Board make any advance or loan (except in pursuance of existing contracts) to any stabilization corporation or co-operative ass'n any of whose officers or employees receives as compensation or salary an amount in excess of \$15,000 a year, unless such compensation or salary is payable under a contract in force on the date of approval of this Act.

The House appropriations com'ite on Mar. 2 cut \$880,000 from budget estimates for expenses of the Farm Board.

Farm Board Wheat to Charity

Pres. Hoover on Mar. 7 signed the bill turning over to charity 40,000,000 bus. of the Farm Board's wheat owned by the government's Stabilization Corporation and pledged with bankers as security for loans.

To release the wheat from the hands of the banking syndicate the Farm Board will have to repay about \$14,000,000, and the transfer to the Red Cross without reimbursement to the Board will diminish the revolving fund of the Board by \$1.17 per bushel on paper; or 61 cents, actual market value at present, per bushel, practically cleaning up the balance of \$50,000,000 the Board thought it had remaining of the \$500,000,000 "revolving" fund, which seems to have stopped revolving.

To handle the wheat the Red Cross has requested the Millers National Federation to appoint a com'ite to work out the problems of milling the wheat, which is available at more than 400 points. Milling can be paid for out of the wheat, but baking, compulsory in cities of more than 25,000, must be paid for by private charity. The amendment by La Guardia provided that in cities of more than 25,000 population the wheat must be distributed in the form of bread.

Air express rates have been reduced sharply, to less than half the figures formerly asked by the Railway Express Agency.

Brazilian Breweries have been using the surplus coffee crop for fuel under boilers. Here's hoping the fool Farm Board will not do likewise.

Consumption of grain in the manufacture of beer and alcohol was recently reported on by Sec'y Hyde to the Senate. During the years from 1909 to 1917 14,000,000 to 34,000,000 bus. of corn a year was used in the manufacture of alcohol. For malt 54,000,000 to 73,000,000 bus. of barley was consumed annually. In the production of spirits 2,300,000 to 5,828,000 bus. of rye was consumed. That extra consuming demand would help to boost prices.

Ohio Farmers Elevator Ass'n Listen to Business Suggestions

How to build a feed business and what to do about portable mill competition were discussed before the annual convention of the Ohio Farmers Grain Dealers Ass'n, which met at Toledo, Feb. 22-23.

FRED MAYER welcomed the convention in the name of the Toledo Board of Trade.

A. G. PHILLIPS, Chicago, chose "Vitamin D in Business," as the title for his talk on practical methods for building turnover in retail feeds, pitfalls to be avoided, drawing many examples from his wide experience.

A. C. PATZER, Grove City, O., explained his method of meeting portable grinder competition, the cut-price method. Examination of his records disclosed that the cost of his company's grinding machinery had been charged off the books, whereupon he and his directors cut the price of grinding to 5 cents a bu. Portable grinders were unable to meet this competition, trade came back and bought other merchandise so the company felt repaid even the grinding was being done for nothing.

W. R. TABBERT, Toledo, talked on "Taxation and Auditing Problems," demonstrating that methods of bookkeeping have a great deal to do with the amount of taxes a business man has to pay.

M. M. PERKINS, Valley City, O., told how he develops "Merchandise into Profits," explaining selling methods for increasing turn-over.

Among the other speakers were C. J. West, Columbus, on insurance problems, Geo. Tawney, Leipsic, on directors' responsibilities, A. A. Nelson, Peoria, on romance in business, Leroy Melton, Greenville, Ill.; "Farmer" Brown, Washington, D. C.; B. A. Wallace, Ohio State University, on farm problems.

NEW OFFICERS

Election of officers placed for the coming year: L. C. Schmunk, Rocky Ridge, pres.; Leon Gove, Avery, 1st vice-pres.; Wiley Jackson, Holgate, 2nd vice-pres.; C. S. Latchaw, Fostoria, sec'y-treas., all re-elects.

In its resolutions the ass'n went on record as favoring greater economy in government.

Hearings to Question European Corn Borer Quarantine

A public hearing to consider the European corn borer quarantine and its possible discontinuance will be held in Washington, D. C., in company with similar hearings on the federal quarantines covering the Japanese beetle, the white pine blister rust and narcissus bulbs, Mar. 24-28, at the National Museum, beginning at 10 a. m. each day. In his announcement Sec'y Hyde said:

What we propose to find out . . . is just how much benefit results from our effort and if the cost is justified. Any person or group interested in the possible revocation of these quarantines may appear at the conferences and be heard, either in person, or by attorney.

The conferences will consider whether or not the investigation of control methods, parasites, and resistant varieties has reached the stage where federal quarantines on interstate movement of plants should be removed; whether the spread of the diseases and pests has been so wide as to make further federal control undesirable and ine'pedient; and whether the states which are threatened by these pests and diseases are able to fight them as efficiently and economically as the federal authorities can do it.

The Mar. 24 hearing will consider the European corn borer quarantine now effective in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Ohio, Michigan, Indiana and West Virginia.

Wheat and Corn 1914 to 1933

By FRED UHLMANN, Chicago, before the American Statistical Ass'n at New York

The present Farm Board Act was passed at the most inopportune time and under the most inauspicious circumstances possible. The Agricultural Marketing Act, however, was set in operation when overproduction was already so great that the breaking point was close at hand; and therefore even with the enormous purchases by the Federal Farm Board and the large sum of \$500,000,000 at their command, there was a steady decline in prices which, to my mind, has not yet reached its culmination.

Carryovers Enormously Increased.—In the years 1921 to 1928 our average carry-over of wheat from year to year was 128,000,000 bus. It has risen rapidly each year that the farm board has been in operation, until last July it reached the enormous total of about 334,000,000 bushels; and at the end of this crop year it will probably be more than 400,000,000 bus. This quantity is about equal to the total amount of wheat which was exported from the United States in the combined years 1928, 1929, and 1930.

What Is the Future Outlook?—From the Napoleonic wars and our own wars, it has been demonstrated that extremely high prices always bring their own reaction. In fact, it can be stated as an axiom, not of wheat alone but of almost any commodity, that the higher the ascent and the longer it stays high, the more precipitate will be the fall and the longer it will remain low.

Drawing the natural conclusion from this and looking still further into the future, it is evident that wheat will not forever remain at the unproductive price levels now existing, but that we shall have higher prices again sooner or later. This will come about, as it did in 1897, thru reduction in acreages and neglect of land, and thru less government interference; and the earlier these become operative the earlier will be the return to a normal status.

High Prices in 1932 Unlikely.—However, the outlook for the coming year is not very favorable. The supply is so large that it is scarcely to be expected that wheat should sell at a moderate to high level unless we should have crop failures. Crop scares will come in the spring, but they will be less effective than usual this year unless caused by real and serious damage to growing crops. If they are only the usual scares of the temporary type, they will bring about only temporary rallies. It is not likely, therefore, that we shall have high prices during 1932 unless a catastrophe should occur in two or three of the larger wheat-producing countries, but such misfortunes are rare. A crop failure in one important country would not accomplish the result. It would require wholesale destruction over a large area.

It would be more pleasant, no doubt, to overlook the realities which confront us, but it would be a gross neglect of duty to fail to point out the perils, or to minimize them by so much as a jot. The legislators, thru the Farm Board Act, have led us to the edge of the abyss, and if we wait for them to realize what they have done and retrace their steps, it may be too late. Therefore, the duration of the wheat depression will depend to a great extent upon the length of time that will be required before the politicians begin to grasp economic realities.

The Corn Outlook.—I am glad to say that I can speak much more hopefully of the corn outlook, and this is more pertinent to the prosperity of our own country than wheat, for the reason mentioned in the early part of my talk and also because 85 per cent of the corn raised is fed to livestock and remains in the State in which it is raised.

The price of corn is low at the present time more on account of the great economic depression than because of overproduction. Consumption of corn, unlike that of wheat, is a rather variable affair, dependent on available supply and on price. The higher the price the less corn used, and the lower the price the more consumed. At the present price our consumption will be very large; and all we need is somewhat more prosperity and a little help from Nature to bring about a reaction which will place corn once more on a remunerative basis. This year, owing to the very mild winter, consumption was below normal.

In conclusion, while I do not wish to tire you with an imposing array of statistics, yet I wish to show further reasons why I believe wheat prices, under normal conditions, will be low for the year 1932.

The amount of wheat in the largest centers of the United States called "Visible Supply," is about 203,000,000 bus. It will decrease very slowly from now on. In 1918 it decreased at one time to as low a point as 1,000,000 bus. In the years between 1917

and 1925 it decreased yearly at one time or another to 16,000,000 bus. Last year we started the new crop year on July 1st with 187,000,000 bus., and this year it will probably be larger. While we shall export this year only about 15 per cent of all the wheat shipped from the various large surplus countries, our own carry-over will be about 200 per cent as large as the combined carry-overs of all the other large exporting countries.

At the present time the Chicago market is higher than Liverpool, which is the European barometer of price levels. It actually costs 15 cents a bushel to ship our wheat to Liverpool, even at present abnormally low ocean freight rates. Therefore, we are in a hopeless position at present to do any export business.

However, let us not entirely lose hope. The American farmer, as well as the business man, has always worked out his problems. Beginning with the 1933 wheat crop, everything will look more cheerful. The farmers all over the world are acting much the same as the merchant would and must act in adverse times. The first year they have losses they do not change their policy, hopeful that something will occur during the second year to alter their position; but at the end of a second bad year, with a third loss confronting them, corrective measures are usually taken. Large decreases in world's acreages will put a different complexion on the situation.

Hoarding of Wheat.—In 1933 I further believe the administration will arrive at the same conclusion in regard to hoarding of wheat that was recently reached in reference to hoarding of money. Such hoarding is intolerable, and I believe that the present hoarding of wheat on the part of government agencies thus far has done more harm than the public's hoarding of currency. In fact, I am convinced that had it not been for the Agricultural Marketing Act, we should now be on the road to improved wheat prices. Public confidence never would have been destroyed as it was, probably no hoarding of money would have taken place, and the present Glass-Steagall bill would have been unnecessary. The French have a proverb, "It is only the first step which is wrong. Everything else is a consequence."

Repeal Bad Laws.—Therefore, the great need is to remove the causes which brought about the present depression in grain prices and general business conditions. It is my belief that this requires, not new laws, but the repeal of those which are responsible for the distrust which in turn led to the hoarding of money.

From Abroad

A Dutch-Roumanian syndicate is being formed to take over and build elevators in Roumania.

Corn, which was to have paid a duty, will come in free under an amendment, Feb. 23, to the Import Duties Bill of Great Britain.

A Bonus to wheat growers on the acre basis instead of the present 5 cents per bushel was debated recently in the House of Commons at Ottawa, Ont., and rejected.

Italy's restrictions on the use of foreign wheat were relaxed Mar. 1. Instead of only 25 per cent the mills will be permitted to use 40 to 60 per cent, depending on the part of the country in which they are located.

West Australia Farmers, Ltd., has asked a government concession to build bulk handling elevators, and to charge one cent per bushel until 260,000,000 bus. had been handled, to cover interest and sinking fund.

There is not the slightest doubt that the Government estimate was wrong last year, inasmuch as the country has practically already exported the amount of maize which the Ministry calculated as the total production, and we have still close on a million tons still to go, to judge by the volume of maize on outside stations and in the ports. Granting a local consumption of 1,500,000 tons, which is lower than generally accorded, we should say that the production of maize from the last crop was not short of eleven million tons. Under the circumstances, either the official figures were wrong in the matter of average yield or in the number of hectares sown.—*Times of Argentina*.

Guaranteed Wheat Price in Great Britain

The government on Feb. 24 revealed its plan to guarantee growers 10 shillings per cwt. for domestic wheat, equivalent to \$1.03 1/4 per bushel.

The funds are to be obtained from millers using imported wheat.

If the home grown wheat supply increases to more than 50,000,000 bus. the bonus will be reduced.

The scheme is bound up with the import tariff and the quota.

For this barrier to their export trade the wheat growers of North America have the Canadian Wheat Pool and the Federal Farm Board to thank. It never pays to try to hold up your regular customers.

Meditation Merited by Wheat Growers

The Board of Meditation should next sit down on the steps of the capitol and meditate on the million dollars that the Federal Farm Board is going to receive for its activities. They should meditate deeply on the fact that the Farm Board is now holding 180,000,000 bus. of wheat, which represents an outlay of \$1.17 a bu. The chairman of the Farm Board said on Feb. 6 that if the wheat were sold then the board could only get sixty cents a bu. for it. Which would represent a loss of \$102,000,000 to the treasury of the said U. S. Meditate on that, Board of Meditation!—R. H. L. in the Chicago Tribune.

New Kansas Chief Grain Inspector

Jasper T. Kincaid of Olathe, Kan., has been appointed chief of the Kansas state grain inspection and weighing department, with headquarters at Kansas City, Mo., to succeed Geo. B. Ross, resigned.

For six years Mr. Kincaid was state tax commissioner, having to do with the assessment of railroad and elevator property.

As manager of the grange store at Olathe he became familiar with the problems of the country merchant handling feed and grain. As a member of the Kansas Legislature in 1913 and 1915 he is said to have assisted in developing the laws governing the grain inspection department. He always insists on accuracy and efficiency and never tolerates loose methods in business. He is about 60 years of age.

It is hoped that Mr. Kincaid will resist all attempts by politicians to foist incompetent subordinates upon him.



J. T. Kincaid, Olathe, Kan., Kansas Chief Grain Inspector

Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

ARKANSAS

Little Rock, Ark.—The Cameron Feed Mills is the new name of the Hayes Grain & Commission Co., which has been in business for 21 years. Guy Cameron is pres., W. W. Knight, vice-pres., and Joe E. Scott, treas.

CALIFORNIA

Los Angeles, Cal.—H. J. Barneson & Co. have been absorbed by Russell, Miller & Co.

San Diego, Cal.—Irwin & Co., who operate an elevator and feed mill, are in liquidation.

Los Angeles, Cal.—The California Hay, Grain & Feed Dealers Ass'n will hold its annual meeting in this city Apr. 22 and 23.

Irvine, Cal.—The Irvine Warehouse Co. is making extensive improvements on its warehouses at this station in the way of installing improved machinery and modernizing the plant in several ways so as to minimize re-cleaning and grading costs on lima beans. Otto Knoche, formerly with the Mullen interests of Denver, Colo., is in charge of the work.

Los Angeles, Cal.—Gordon C. Williams, who started in the grain business before the World War with United Grain Growers, Winnipeg, and served all during the war with the Wheat Buying Agency for the Allies in Canada, recently severed his connection with H. J. Barneson & Co., and is now manager of the brokerage office of Rosenbaum Grain Corp. here. His host of friends in the cash and option trade know he will win the success his wide experience fully merits.

CANADA

Ottawa, Ont.—No amendments will be made to the Canada Grain Act at the present session of the House of Commons unless something arises which necessitates such action.

COLORADO

Padroni, Colo.—Fire of undetermined origin destroyed the plant of the W. C. Harris Grain Co. on Feb. 28.

Fort Collins, Colo.—The elevator on the F. P. Rudolph farm, three miles from Fort Collins, was damaged by fire on Feb. 24; loss, \$3,000 on building and \$50 on contents; no insurance.

Wray, Colo.—Elmer Olson, local manager for the Shannon Grain Co., died Feb. 18 at Mercy Hospital, Denver, and was buried at Wray. Mr. Olson was 56 years old and had run the Wray mill and elevator for 16 years.—G. W. Roller. [Another report states that Mr. Roller will succeed Mr. Olson as manager for the Shannon Grain Co.]

ILLINOIS

Beardstown, Ill.—The Schultz-Baujan Milling Co. planned starting construction on its new storage tanks the first of this month, providing March played no tricks with its plans.

Rosamond, Ill.—Mail addressed to the agent of the Ohlman Grain Co. at this point is returned marked "Moved, left no address."

Cuba, Ill.—Eight sacks of clover seed were stolen from the Farmers Co-op. Elvtr. Co.'s elevator by thieves during the night of Feb. 15.

Forrest, Ill.—I have bot out Boyd E. Webber and will again operate the elevator here. Mr. Webber has gone to California.—R. Hippen.

Nokomis, Ill.—Barnstable Shaper Feed & Supply Co., Inc., incorporated; capital stock, \$9,600 preferred and \$14,400 common; incorporators: Clarence W. Barnstable, Roy Shaper, H. H. Whitten; general feed business.

Wellington, Ill.—Henry White Norton, formerly engaged in the grain business at this place, died at Geneva, Ill., Feb. 17, following a stroke of paralysis and other complications. He was nearly 80 years of age.

Hillsboro, Ill.—Barnstable Ware Feed & Supply Co., Inc., incorporated; capital stock, \$8,800 preferred and \$15,200 common; incorporators: Frank S. Ware, Clarence W. Barnstable, H. H. Whitten; general feed business.

Swan Creek, Ill.—Thieves took nine bus. of clover seed from the Sands Elvtr. Co.'s elevator during the night of Feb. 22, also robbed Bader & Co.'s elevator, where they took nine gallons of cylinder oil and a watch.

Taylorville, Ill.—Barnstable Bros. Food, Feed & Supply Co., Inc., incorporated; capital stock, \$6,400 preferred and \$9,600 common; incorporators: Edwin S. and Clarence W. Barnstable, Roy Shaper, H. H. Whitten; general feed business.

Sheridan, Ill.—The grain business of V. L. Anderson, whose death was reported in the Journals last number, is to be continued under the supervision of his daughter, Mrs. V. A. Hess. Mr. Anderson was a charter member of the Illinois Grain Dealers Ass'n.

Champaign, Ill.—Airforce Grain Co., incorporated; capital stock, \$100,000; incorporators: W. Z. Black, Champaign; H. L. Gates, Tuscola, and Everett L. Johnson, Ottawa; to operate elevators and conveyors and do a general grain business, also deal in live-stock, etc.

Homer, Ill.—It is reported that J. M. Current & Sons' elevator that burned last month, as reported in the last number of the Journals, will be rebuilt, possibly this year. All the grain in the house was insured, and the building, valued at \$27,000, was insured about one-half.

**Analytical Accountants
AUDITORS -- SYSTEMATIZERS
Income Tax Counsellors
Specializing in Grain, Mill & Feed
Accounting**
H. J. MAYER & COMPANY
29 South La Salle St., Chicago, Ill.
TELEPHONE STATE 6547

Danville, Ill.—The 39th annual convention of the Illinois Grain Dealers Ass'n will be held in this city on May 10 and 11.

Champaign, Ill.—The regular meeting of the grain trade of the Champaign territory was held in this city, at the Hotel Inman, on Mar. 8, at 6:30 p. m., dinner being served at that hour. Railway right-of-way lease sites and rentals was one of the several subjects discussed.

Rochester, Ill.—Twist Bros. elevator office is reported as having been destroyed in a fire, on Feb. 28, that caused about \$100,000 damage and burned nearly half the buildings in this village. The town has no fire fighting equipment and help had to come from Springfield, seven miles away.

Rushville, Ill.—The Rushville Farmers Grain & Livestock Co.'s seed house was entered by thieves in the night of Feb. 12 for the second time within two weeks, and six sacks of clover seed stolen. Entrance was gained by breaking the bottom panel of the door. The company wisely carries burglar insurance.

Gilman, Ill.—Grain men of the Gilman territory will hold a meeting in this city Mar. 10, at the Green Lantern, where dinner will be served at 6:30 p. m. This meeting promises to be unusually interesting, as the February meeting was not held on account of the convention of the Illinois Farmers Grain Dealers Ass'n held at Peoria.

Peoria, Ill.—On Feb. 19 the Peoria Board of Trade held a special celebration of the Washington bi-centennial on the floor of the exchange. Philo B. Miles, dean of the exchange, recited from memory the tribute to Washington written by Gen. William Henry Harrison. Mr. Miles committed this tribute to memory when he was a boy of 12 years.

Camargo, Ill.—The new elevator recently completed by Fred Kaga at this point, and operated as the Camargo Grain Co., is reported to have suspended business, and it is rumored that Mr. Kaga owes about \$6,000 on the land and building material and the lumber dealers are said to have filed liens on the building. The whereabouts of Mr. Kaga were reported as unknown several weeks ago.

Havana, Ill.—What are known as the McFadden Grain Elvtrs., located at this point, at Topeka, Easton, Biggs (Easton p. o.) and Chandlerville, Ill., have been taken over by the Brook Grain Co., which operates a line of elevators in northwestern Indiana, and were re-opened Mar. 1. The personnel of the Brook Grain Co. is Fred Lyons, of Brook, Ind., and Beach-Wickham & Co., of Chicago. Mr. Lyons has moved to Havana and will have entire charge.

CHICAGO NOTES

Lamson Bros. & Co. have announced that Charles L. Trumbull has become associated with them.

No 1 and No. 2 yellow hard winter wheat would be deliverable on futures at contract price under an amendment to the rules of the Board of Trade to be voted upon Mar. 11. A ballot will be taken also on eliminating No. 3 rye as a contract grade at 5 cents discount.

For Quick and Satisfactory Personal Service Consign All

JAIFC **D** **RVK**
GRAINS AND SEEDS TO RYAN — CHICAGO — 34 YEARS' EXPERIENCE
CLEARING THROUGH CARHART - CODE - HARWOOD CO., CHICAGO

Recent new members elected to membership in the Board of Trade are: Frank E. McDonald, Chicago; Gray McW. Bryan, New York; Gerrit Verbeet, New York, representing Rotterdam and London grain firms.

The vote of the Board of Trade membership on the proposal to change Rule 111 so that the special transfer fee fund might be used to purchase 5% gold bonds of the Board of Trade Bldg. as well as purchase and retire memberships in the board was 400 to 180 in favor of the change.

George D. Brown, retired Board of Trade operator, died of heart disease at his home in this city, at the age of 76 years, on Mar. 6. Mr. Brown came to Chicago from England when a lad of 10 years, started in the grain business as a messenger boy and became one of the most active traders in the corn pit. He retired 19 years ago.

John J. Badenoch, member of the Board of Trade since 1874, was reported early in March as being ill at his home in Oak Park, a suburb of Chicago, suffering from a heart ailment. Mr. Badenoch, who is 81 years old, is said to have made light of his illness, saying it was not serious and that he would soon recover. About the middle of the "gay nineties" Mr. Badenoch was chief of police of Chicago.

INDIANA

Pierceton, Ind.—Kraus & Apfelbaum, Inc., announced on Feb. 17 that their new feed mill was ready for operation.

Linden, Ind.—Mail addressed to the Farmers Co-op. Co. of Indiana at this place is returned marked "Out of business here now."

Cutler, Ind.—Machinery for the new elevator of the Cutler Co-op. Elvtr. Co., which replaces the house burned last July, has been purchased and is expected to be in operation soon.

St. Bernice, Ind.—Bert Mishler bot the elevator and feed mill at this point, which was sold by U. S. Court at bankrupt sale Feb. 29. Mr. Mishler will conduct a grain, coal and feed business.

Greensburg, Ind.—J. M. Hornung's Sons Mill has been re-opened by Albert Hornung, after being closed six months, and will be known as the Hornung Mill. Feed and flour will be manufactured.

Peru, Ind.—Hite Bros. flour mill has been bot by H. H. Kennedy, who will operate it under the name of the Peru Milling Co., making flour, feeds and cornmeal, as well as doing custom grinding.

Kentland, Ind.—Patrick R. Mullen, who for 32 years was steadily employed at the McCray & Harlan Grain Co.'s elevator here, died Feb. 5, following an illness of more than a year from cancer.

Indianapolis, Ind.—McEwan-Butturff Grain Co., Inc., incorporated; capital stock, 900 shares, no par value; incorporators: George F. Butturff, Charles H. McEwan and Lester S. Daugherty; objects, to engage in grain business.

Foraker, Ind.—Henry Weaver's elevator and feed mill burned Saturday night, Feb. 20; loss on building and equipment, \$12,000, partly insured; loss on grain and feed, \$3,000, fully insured; 1,700 bus. of corn, 2,000 bus. of oats, 3,000 bus. of wheat and \$500 worth of feed were in the plant, and part of this was salvaged. Mr. Weaver and Isaiah Shaum, the operator, were working on some wheat bins when one of them dropped a lantern, which caused the fire.

Sell by SAMPLES!
Spear Envelopes
are Best for Sampling
Write for Prices any Quantity

JOHN A. HEINRICH, INC.
108 WASHINGTON NORTH MINNEAPOLIS

Chrisney, Ind.—The County Farm Buro has recently erected a building on the Southern Ry. tracks and has installed a feed mill and mixer.

Fort Wayne, Ind.—K. & A. Seed Co., Inc., incorporated; capital stock, 1,000 shares at \$100; incorporators: Robert Y. Keegan, Lucy E. Bueter, Mildred L. Braun; to operate elevators, mills, factories, warehouses and granaries.

Greencastle, Ind.—A truck belonging to Campbell & Ogles' elevator was damaged, on Feb. 19, when grease and oil around the motor were set on fire by wiring. Chemicals extinguished the blaze and the truckload of wheat was not damaged.

Indianapolis, Ind.—Indiana wheat growers are hanging crepe on the Central States Grain Ass'n by cancelling their marketing contracts with the wheat pool and resigning. They have this option the first half of March each year and naturally they are so disgusted with the bungling methods of the Farm Board they are resigning in large numbers.

Indianapolis, Ind.—The Board of Managers of the Indiana Grain Dealers Ass'n has decided to hold more group meetings this year and will dispense with the mid-summer meeting. The group meetings of the state associations have helped them to bring the dealers of every section closer together and to inculcate better methods of business to the great advantage of everyone concerned.

Indianapolis, Ind.—The following have applied for membership in the Indiana Grain Dealers Ass'n recently: Wilson & Son, Russellville; McEwan-Butturff Grain Co., Indianapolis; Tocsin Lbr. & Grain Co., Tocsin; New Lisbon Grain Co., New Lisbon; Wm. Steeb, Crown Point. Individual members of the ass'n are urged by Sec'y Sale to send in all the new members they possibly can, and get their names on the honor roll for the year.

Indianapolis, Ind.—In line with the efforts of the Indiana Grain Dealers Ass'n to secure a reduction in electric power rates, as reported in the last number of the Journals, a called meeting of the board of managers of the ass'n and the legislative and power rate com'ites in this city was held on Feb. 22. Everett McVicker, chairman of the power rate com'ite, and Fred K. Sale, sec'y of the Indiana Grain Dealers Ass'n, drew up a petition for materially reduced power rates in the state and presented it to the Public Service Co. of Indiana. A questionnaire had previously been sent out by Mr. Sale to all grain dealers, millers and feed dealers in the state, requesting definite information on their present electric power rate schedules. About 300 questionnaires were returned and a great deal of time was spent by the com'ite and Sec'y Sale in checking these over and arriving at a fair and equitable average schedule of rates, which, in their opinion is absolutely necessary for the elevators and mills to obtain in order to continue to use electric power. It is expected that it may be 30 or 60 days before definite advice is received as to whether the schedule is acceptable, or whether the Utility Co. will offer a counter proposal if the request can not be met.

The delay depends to a large extent upon a hearing of the power interests in the southern part of the state before the Public Service Commission of Indiana. Feb. 1 the commission put in a temporary reduced rate in the Indianapolis territory, and after a month or so of operation, possibly sooner, the hearing will be held. If the grain men are successful in getting what they have requested, it will mean a saving of from \$15 to \$40 a month for the power users.

IOWA

Webster City, Ia.—A feed mixer was recently installed by the Farmers Elvtr. Co.

Hartley, Ia.—Mann & Mann have installed a Bryant Magnetic Separator in their attrition mill.

Kanawha, Ia.—Thomas Berhow has sold his feed mill and business to Louis Faber, of Forest City.

Iowa Falls, Ia.—A corn sheller and a pneumatic husk cleaner were recently added to the equipment of the Farmers Co-op. Elvtr. Co.'s elevator.

Cedar Rapids, Ia.—A license to inspect and grade corn and oats was recently issued to Henry M. Sorenson.

Forest City, Ia.—The Farmers Elvtr. Co. will install equipment for the manufacture of commercial feeds.

Newburg, Ia.—The Newburg Farmers Elvtr. Co. is installing a new truck scale. G. H. McCarel is the manager.—A. G. T.

Sioux City, Ia.—The Western Grain & Feed Dealers Ass'n will hold its convention in this city on May 10 and 11, at the Martin Hotel.

Kennedy, Ia.—The Farmers Elvtr. Co. recently improved the equipment of its elevator by the installation of a corn sheller and a husk cleaner.

Oakland, Ia.—J. S. Campbell, who has been manager of the Farmers Co-op. Co.'s elevator here for 13 years, resigned Mar. 1 and moved to his farm.

Albia, Ia.—W. L. Logan, who recently bot the Albia Roller Mills, as reported in the Jan. 13 Journals, has installed machinery and is making a new breakfast cereal.

Forest City, Ia.—The Farmers Elvtr. Service Co., which jobs merchandise handled by farmers' elevators of Iowa, recently elected W. C. Lingren, manager of the Farmers Elvtr. Co. at this point, a director.

Oakton (Davenport p. o.), Ia.—Bert M. Halladay, former manager of the Farmers Elvtr. Co.'s elevator at Letcher, S. D., has been appointed manager of the Farmers Elvtr. Co.'s elevator at this point.

Lake Mills, Ia.—Work was started on Feb. 22 taking down the elevator building near the C. & N. W. right-of-way, the property of the Nye & Jenks Grain Co. It was planned to ship the lumber to one of the company's plants.

Victor, Ia.—E. S. Yeisley's elevator was one of 11 business places entered by thieves, during the night of Feb. 28, who obtained a total loot of only \$50. Entrance was gained thru windows in the rear of the buildings.—Art Torkelson.

Sioux City, Ia.—An attempt was made by burglars Saturday night, Feb. 20, to crack the safe in the office of the Fleischmann Yeast Co. The dial was knocked off, but the strong box was not opened. Entrance was gained to the building thru a side window.—A. T.

Blencoe, Ia.—George A. Arnold, reported in the last number of the Journals as having been recently appointed manager of the Blencoe Farmers Co-op. Elvtr. Co.'s elevator, was the first manager of this elevator company, having organized it in 1912 and remaining as manager until 1917.

Clermont, Ia.—The Clermont Farmers Co-op. Co., which has been successfully engaged in the handling of grain, livestock, feed and seeds on the co-operative plan for almost 20 years, has voted to terminate its existence when its charter expires Apr. 20. Some of the members favor forming a new organization.

Marengo, Ia.—The office safe of the Marengo Grain Co. was damaged, during the night of Feb. 11, by thieves, who tried to blow the door open and succeeded in ruining it without tearing it from its hinges. They might have saved themselves much hard work, however, if they had but turned the handle, instead of hammering it off, as the safe had been left unlocked after all money and checks had been taken to the bank the previous day. Entrance was gained to the office by prying up a window and breaking the clasp.

Western Grain Dealers Mutual Fire Ins. Co.

Hubbell Bldg. Des Moines, Ia.

Call or Wire

Our Expense for Immediate
Protection on

Elevators—Grain—Dwellings
Lumber Yards—Merc. Property

Coin, Ia.—L. G. Alexander is the new manager of the Coin Lbr. & Grain Co.

Creston, Ia.—The Farmers Co-op. Co. recently appointed L. M. Randolph manager of its elevator.

Mount Union, Ia.—Fire of undetermined origin destroyed the Farmers Elvtr. Co.'s elevator here at midnight, Friday, Feb. 26; loss, estimated at \$10,000; \$5,000 insurance. No grain was stored in the building. It had been used for oil storage and contained lubricating oil valued at \$1,000.—Art Torkelson, with Lamson Bros. & Co.

Blencoe, Ia.—Charles Barnes will build an elevator at Blencoe. The plans for the house have been drawn and work will be started at once. The elevator is to be a cribbed structure iron clad and will have a capacity in excess of 25,000 bus. Mr. Barnes, who also operates a gasoline and oil distributing plant here, is widely known throughout western Iowa, as he has been engaged in the grain business for the past 25 years. For the past 13 years he was manager of the Farmers Co-op. Elvtr. Co.'s elevator at Blencoe and he recently resigned this position to engage in business for himself.

KANSAS

Bazine, Kan.—W. H. McCaffery has resigned as manager of the Farmers Elvtr. Co.'s elevator.

Hutchinson, Kan.—The Board of Trade membership of R. W. Vance has been transferred to L. A. Ritterhouse.

Sublette, Kan.—J. H. Keast, manager of the Co-op. Elvtr. Co.'s elevator, is under arrest charged with embezzlement.

Blue Rapids, Kan.—Lightning protection for the Farmers Co-op. Grain Co. has been provided by the Moore Bros. Lightning Rod Co.

Dodge City, Kan.—C. C. Isely, well known grain dealer, is a candidate on the Republican ticket for nomination for U. S. Senator from Kansas.

Wellsford, Kan.—The warehouse and stock of W. L. Dunbar, J. C. Lemon, and A. L. Matthews were destroyed by fire of unknown cause on Feb. 26.

Salina, Kan.—Ted Branson will discontinue the grain business in this market and engage in other lines. He has been operating as the Ted Branson Co.

Almota, Kan.—Chas. Sharp, manager of the Farmers Elvtr. Co.'s elevator, died recently from cancer. Barney Hagerman, for many years with Bowman Bros. at Logan, has succeeded Mr. Sharp.

Winfield, Kan.—While the new concrete storage addition to the Consolidated Milling Co.'s plant, reported in the last number of the Journals, is under construction, the mill will be completely motorized and brought up to date, and new machinery installed to replace the old. The new storage addition is to be completed by June 1.

Lyons, Kan.—In a friendly proceeding to protect the assets of the company during adjustment of financial problems, F. E. Long, pres. of the company, has been appointed receiver of the Central Kansas Milling Co. Business will be carried on as usual and the mill continue operation, and little trouble is expected in straightening out the company's affairs.

Hutchinson, Kan.—Construction is expected to start this spring on the 14-story structure, the lower seven floors of which will provide a new 110-room hotel and the upper seven a new grain office center, with the Hutchinson Board of Trade at the top, as previously reported in the Journals. The site of the old Midland hotel, recently razed, is the location of the new half-million-dollar project.

Delia, Kan.—The grain elevator, including equipment and machinery, known as the Farmers Elvtr., together with the flour building and coal sheds, were sold by the sheriff on Feb. 15, under an execution from district court. Frank Matyak bot the property for \$2,900.

Hutchinson, Kan.—Since the membership failed to give the necessary two-thirds majority when voting on the proposal to change the constitution and by-laws of the Hutchinson Board of Trade in order to make it a contract grain market, this city will not have a futures wheat market, altho the application filed with the U. S. Dept. of Agriculture at Washington was acted upon favorably. The vote was 30 for and 18 against the change.

Kingman, Kan.—Jess Braly, grain dealer of this city, and a brother of H. F. Braly, of the Braly Grain Co., of Wichita, Kan., was found dead in his parked car, an apparent suicide, on Feb. 27. He was last seen at about 9 o'clock in the morning, and his body was not discovered until evening, in his car parked on the main highway where people had been passing during the day. Ill health and financial troubles were given as the cause of his act. He is survived by his widow and three children.

KENTUCKY

Lawrenceburg, Ky.—Windstorm damaged the plant of the Eagle Roller Mills, Inc., on Feb. 12.

Waynesburg, Ky.—C. C. Phillips flour and grist mill burned recently; partly insured; a quantity of corn and wheat stored in the mill was destroyed.

Harrodsburg, Ky.—Thieves broke into the grain mill of Sandusky Bros. Feb. 27 or 28, battered off the safe combination and got away with \$250 in cash.

Beaver Dam, Ky.—Erection of a large milling plant will be started soon by the Beaver Dam Milling Co., whose main plant burned in January with a \$60,000 loss. The company's products are feed and flour.

Louisville, Ky.—Frank C. Dickson, pres. of the Kentucky Public Elvtr. Co. and well known to elevator and grain men, died at his home at Tip Top (Camp Knox p. o.), Ky., on Feb. 23, at the age of 75 years, after an illness of three weeks from heart disease. Mr. Dickson, who was a native of Louisville, had managed the Kentucky Public Elvtr. Co. for many years, and was active until his last illness. He was interested in many business, civic and social activities, and was recognized as a leader. He is survived by his widow, two sons and several grandchildren.—A. W. W.

MARYLAND

Hoods Mills, Md.—The grain and feed mill of P. F. Obrecht & Son, together with its entire contents, was destroyed by fire on Feb. 29.—R. C. N.

Frederick, Md.—James H. Gambrill, pioneer grain merchant and miller, widely known in western Maryland, died on Feb. 26, after an illness of a week, at the age of 102 years. He retained his faculties until his last illness, and was remarkably alert for one of his age. With the exception of one year in Baltimore at the close of the Civil War, he had resided in or near Frederick for 83 years. He is survived by two sons and two daughters, grandchildren and great-grandchildren.—R. C. N.

BALTIMORE LETTER

Chief Grain Inspector David H. Larkin, of the Chamber of Commerce, celebrated his 55th birthday Mar. 1.—R. C. N.

Before an audience of 325 persons Dr. David J. Price, principal engineer of the Chemical Division of the Department of Agriculture, gave an illustrated lecture on "Dust Explosion Hazards" at the Recreation Pier, Baltimore, on the evening of Feb. 24. H. W. Feemster, superintendent of Western Maryland Railroad grain elevators, who made the arrangements for Dr. Price's lecture, invited the heads of all industries which have a dust hazard to control and the response was most encouraging.—R. C. N.

Edward L. Davis, for many years identified with the grain export firm of Gill & Fisher, of this city, died of heart trouble late in February.—R. C. N.

J. Murdoch Dennis, pres. of Dennis & Co., Inc., grain commission merchants and forwarders of this market, is on a cruise to the West Indies.—R. C. N.

Chester L. Weeks, who has been district manager of the Farmers' National Grain Corp. here since the Baltimore office was opened, has been succeeded by G. A. Kublin, formerly of St. Louis.—R. C. N.

MICHIGAN

Belleville, Mich.—Roofing was torn off the building of the Belleville Milling Co. recently in a windstorm.

Sandusky, Mich.—On Feb. 12 windstorm blew a large door off the west elevator and damaged the roof of the office of the Michigan Bean Co.

Alma, Mich.—Earl E. Jones has taken over the mill formerly operated by I. N. Taylor and known as the Sumner Grist Mill and will operate it.

Stockbridge, Mich.—The Stockbridge Elvtr., owned by Joe P. Olks, of Jackson, burned Saturday night, Feb. 20; loss covered by insurance; 1,000 bus. of barley, 100 bus. of beans, a half carload of salt, several hundred pounds of chicken feed, oyster shell, etc., were destroyed also. The building had been used for storage purposes only since last August, at which time the business was moved into a new elevator building.

Lowell, Mich.—The battery of 100 automatic bean-sorting machines of the photoelectric cell type, installed in the General Bean Co.'s plant here, are now operating. Beans by the carload are arriving in Lowell daily and since the beginning of the last week of February the new machines have been operating day and night, 21 hands being employed to take care of the output of the 100 machines, the hands working in 8-hour shifts. This plant is said to be the only one in the world sorting beans without the aid of the human eye.

MINNESOTA

Stockton, Minn.—Fire damaged the cupola of the Farmers Elvtr. Co.'s elevator slightly on Feb. 11.

Canby, Minn.—A new head drive has been installed by the Farmers Elvtr. & Supply Co. recently.

Fosston, Minn.—A magnetic separator has been added to the feed mill equipment of S. S. Stadvold.

Renville, Minn.—A magnetic separator has been installed ahead of the feed mill in the Farmers Elvtr. Co.'s elevator.

Spooner, Minn.—Nels Olson's warehouse and former feed grinding building burned recently. It was a total loss.

Glencoe, Minn.—New rolls and other equipment have been added to the mill of the Farmers & Merchants Milling Co.

Hoffman, Minn.—The feed mill at the R. H. Lang Elvtr. has been improved by the installation of a magnetic separator.

Sanborn, Minn.—The feed mill operated by Duley Bros. has been protected from fire by the addition of a magnetic separator.

We Finance

grain, grain products, seeds and soy beans while stored in your own mills and elevators. Reasonable rates. Details on request.

THE GENERAL STORAGE CO.
Broadway and E. 15th St., Cleveland, O.

Adair-Morton Grain Co.

Wichita, Kansas

WHEAT-CORN-OATS-KAFIR

GRAIN & FEED JOURNALS Consolidated

Slayton, Minn.—Guy W. Hollenbeck, who operated the Slayton Farmers Grain & Lbr. Co.'s elevator for several years and who, since the sale of the elevator last summer to the Monarch Elvtr. Co. of Minneapolis, has been assistant manager, is now out of the grain business.

Minneapolis, Minn.—Col. R. A. Wilkinson, who is said to be 89 years of age, has been appointed chief of the grain inspection department by the State Railroad & Warehouse Commission, succeeding George H. Tunell. Mr. Wilkinson has been chief investigator for the state grain inspection department.

Chief River Falls, Minn.—The Math Barzen Co-op. Elvtr. Ass'n, incorporated; capital stock, \$150,000; incorporators: Math Barzen, Fred Kraemer and E. J. Barzen; to establish and conduct a grain marketing enterprise on the co-operative plan. This is the reorganization of the old firm of the Math Barzen Co. into a co-operative. No present changes in the operating personnel of the organization are contemplated.

Otisco, Minn.—The Otisco Elvtr., operated since last September by C. W. Nelson, caught fire at 11:30 a. m., Feb. 18, fire starting in the cupola, and burned to the ground; loss, estimated at \$10,000; partly insured. The elevator contained about 300 bus. of oats. Two feed mills and a quantity of feed were saved. For about 14 years the elevator was run as a co-operative, until about a year ago, when the firm went into receivership.

Wadena, Minn.—Wadena Flour & Feed Whse. Co. has awarded contract to the T. E. Ibberson Co. for the erection of a new feed mill building complete, to be built at once. It will be of crib construction, contain 9 bins, have 2 legs, and will be covered with galvanized iron. A driveway will be attached to the building and the equipment will consist of a 24" attrition mill with two 25-h.p. motors, which will be served with a magnetic separator and a scalper. A 60-bushel Fairbanks Morse Hopper Scale will be located on the workfloor and a Monarch Vertical Mixer will be used. The power for the plant will be furnished by motors. This building is the first unit of buildings that will be built for this company, and will be followed by a large warehouse and office building. The T. E. Ibberson Co. designed the plant.

MISSOURI

Ridgeway, Mo.—It is reported that John Griffin has bot the Ridgeway Elvtr. Co.'s elevator.

Ash Grove, Mo.—The historic old Comet water mill, located northwest of this place, has been repaired and put into operation again. The mill ground flour and meal before the Civil War.

St. Louis, Mo.—The St. Louis Merchant Exchange at a recent meeting voted to donate \$250 to the Missouri-Illinois Crop Improvement Ass'n toward the work of producing better wheat in those two states.

St. Joseph, Mo.—The last of the grain damaged in the fire of the Schreiber Milling & Grain Co.'s warehouse on Feb. 7, was removed Feb. 24, being dumped in the river and given away. It was reported that firemen had made 17 trips to the scene of the fire to pour water on the smouldering remains that had broken into flame again.

Butler, Mo.—M. F. Arnold, who opened his new sweet feed mill last month, as reported in the Feb. 24 Journals, writes as follows about his new plant: "We have a tile warehouse, office and small elevator all hooked up together. Our warehouse and office is 36 feet wide by 100 feet deep, with an L extension at the back connecting up with the elevator. Our plant is a custom grinding and mixing plant. We do not make a practice of shipping out grain. We have shipped in grain the past year, due to a scarcity here. We have in our plant the following machinery: A cold process molasses mixer, 1,000-pound batch mixer, corn sheller, grist stone buhr mill, hammer mill, Clipper Fan Mill, Monarch Corn Cutter. We are making our own feeds and call them 'Just Right.' We are on the Missouri Pacific Railroad."

KANSAS CITY LETTER

R. W. Amerine has resigned as wheat buyer for the Midland Milling Co.

All business of the Eagle Elvtr. Co. and of Henry Lichtig & Co. will henceforth be conducted in the name of Vanderslice-Lynds Co.

Wm. Murphy, chairman of the Board of Trade's radio com'ite, reports that the grain markets are now being broadcast over KFBI, the 5,000-watt station at Milford, Kan., at 9:30, 10:30, 11:30, 12:30 and 1:15 on 1060 kilocycles. A short review of the market is also broadcast from the same station at 9:00 a. m. each week day morning.

Jasper T. Kincaid, of Olathe, Kan., manager of the Johnson County Co-op. Ass'n, has been named head of the Kansas State Grain Inspection Dept., headquarters in this city, succeeding George B. Ross, who resigned recently as reported in the last number of the Journals. It is reported that Mr. Kincaid has not had any experience in grain inspection work.

Members of the Kansas City Board of Trade, millers and members of associated industries gave a dinner at the Kansas City Club, Feb. 25, in honor of J. Juul, pres. and general manager of the Southwestern Milling Co., before his departure for Minneapolis to take up his new duties as pres. and general manager of the Northwestern Consolidated Milling Co. Mr. Juul will continue to be pres. of the Southwestern Co., and Charles W. Sherman, who has been Mr. Juul's assistant, will succeed him as manager in Kansas City.

In the fire and explosion at the Kansas-Missouri Elvtr., reported in the last number of the Journals, the fire started in the old headhouse, which was not entirely of fire-proof construction, and which was completely destroyed. The new headhouse, adjoining the old, of steel and concrete fire-proof construction, was badly warped and cracked by the explosion. Grain in the adjacent tanks was badly damaged. At last reports the death toll of the fire and explosion was two, the second fireman, Frank Stark, dying in the hospital from his burns and injuries. The body of William McDaniels, who was with Stark in the headhouse when it was blown up, was lost in the ruins.

We are indebted to Sec'y W. R. Scott, of the Board of Trade, for a copy of the annual report of that body for 1931. It consists of 48 pages. Its contents include a list of members of the Kansas City Board of Trade, officers, directors and com'ites for the current year; shipments of grain in bushels for the past 32 years; receipts and shipments of grain, bran, shorts, etc., for 1930 and for 1931; daily range of prices by months, 1931, of wheat, corn, oats, etc.; list of grain elevators in Kansas City, with capacities; comparative grain crops of the U. S. for a series of years; wheat crop of the world, by countries, for six years; wheat crops of the U. S. by states, for the past seven years, also corn crops, and other statistics of interest to those engaged in the grain business.

Recently local grain receivers seem to have become obsessed with the desirability of establishing a hospital for the exclusive use of the grain trade. B. F. Hargis, manager for Lamson Bros. & Co., has just returned to his office after a prolonged stay in the hospital. H. S. Patrick, of the Rudy-Patrick Seed Co., is recuperating in Chicago where he has been since Christmas following a major operation. Wm. Murphy and Ed Wood have both taken turns struggling with the flu. C. W. Woodward is talking again after having his windpipes put out of commission by laryngitis. C. W. Lawless recently exhibited new acrobatic stunts resulting in bumps to the back of his head that puzzles even long experienced phenologists. However, he refuses to be kept at home by a few bumps and is out again. A marked departure from the ailing ones is presented by George H. Davis of the Davis-Noland-Merrill Grain Co., who just returned from a vacation in Florida with a ruddy complexion and a steel muscle that would be accepted as a glowing testimonial for the best health resort in the world.

MONTANA

Billings, Mont.—Farmers Union Elvtr. Co., incorporated; capital stock, \$50,000; incorporators: Fred Vandever, E. W. Lansing and George E. Brohaugh.

Great Falls, Mont.—Judgment was recently given in favor of the Rocky Mountain Elvtr. Co., of this city, against Clarence Roth, who had stored wheat in a Fowler house of the elevator company, and who gave a promissory note, with the wheat as collateral. Later the wheat was sold for less than the amount of the note, as prices had declined in the meantime, and the elevator company asked for the balance due on the note, which the court granted.

NEBRASKA

Woodlawn (Lincoln p. o.), Neb.—The elevator of W. G. Hall and Oscar Johnston, operating as the Hall-Johnston Grain Co., burned Feb. 27; cause of fire not known; loss, about \$12,000.

Omaha, Neb.—A generous sum of money for drought sufferers in northern Nebraska has been raised by the Omaha Grain Exchange. A car of feed and \$150 have been contributed by four Omaha mills.

Creighton, Neb.—I bot the coal sheds, scales, office and feed from the Nye-Jenks Grain Co. They tore down the elevator. I will sell coal and use feed shed for oil storage. I will not handle grain at all.—Louis E. Mann, mgr. Mann Oil Co.

NEW ENGLAND

Boston, Mass.—Bertram Smith and Gerald O'Keefe are applicants for membership in the Boston Grain & Flour Exchange.

Northboro, Mass.—The Armeno Cereal Co. has been incorporated to take over the business of a company of the same name, Armeno K. Kaleman being pres. and treas. The business is milling and dealing in grains and cereals of all kinds.

NEW JERSEY

Metuchen, N. J.—W. A. Crowell & Son are going out of business soon.

Adelphia, N. J.—William P. Thompson's old grist mill recently sustained fire damages amounting to \$4,000.

NEW YORK

Berkshire, N. Y.—The Baker Feed Mill burned recently; loss, about \$15,000.

Oswego, N. Y.—It is rumored that floating elevators may be established at this point, of the pneumatic type, capable of discharging 12,000 bus. per hour each.

\$1500 to \$2500
Extra Profits
THIS YEAR



Here is a proposition that will put \$1500 to \$2500.00 or more of extra profits in your bank account this year—a proposition that will often return your original investment the first year—and keep on making profits year after year for a lifetime?

A Permanent Concrete Grain Bin will do it. Permanent Concrete Bins are fire safe, rat proof, and absolutely guaranteed moisture proof—yet cost no more than frame. Write today to nearest company for facts and figures that prove these facts.

Illinois Crib Co., Bloomington, Illinois
Iowa Concrete Crib & Silo Co., Des Moines, Iowa
Nebraska Crib Co., Fremont, Neb.
Waterloo Concrete Corp., Waterloo, Iowa

Investigate
His WAY to Profits

Frankfort, N. Y.—We have noticed in the feed magazines a report that we have built a new feed mill. This is not true but we did build a new warehouse last September to replace the one that burned down Sept. 3. We built this plant (where we are now doing business) three years ago.—George Corrado Milling Co.

Albany, N. Y.—Albany's 13,000,000-bu. elevator began to take shape above the ground during the last week of February, when, after three months of foundation work the James Stewart Corp. began setting the forms for the concrete work. The elevator, which will occupy five acres of land (three more acres to be utilized in the railroad yards and other units), will consist of 104 cylindrical bins, 97 feet high and 28 feet in diameter, with a combined storage capacity of 5,000,000 bus. The remaining 8,000,000 bus. of the total capacity will be in what is called flat storage bins. Orders have already been placed for the grain handling machinery to be installed. The car dumper will have an unloading speed of 10 cars an hour. It is estimated that six weeks will be required to get the concrete poured for all of the bins. Laying of six miles of railroad trackage has been carried on steadily during the winter and is nearly completed. The new 300-foot section of the dock wall in front of the elevator, where trans-Atlantic ships will dock while taking grain, is finished. This gives a total dock length on the Albany side of the port of 3,800 feet. It is said that the elevator may be ready for service about May 1, considerably in advance of the expected time.

NORTH DAKOTA

Coteau, N. D.—The Farmers Elvtr. Co.'s elevator, Arthur Bloom manager, burned late in February.

Geneseo, N. D.—Mail for the Geneseo Farmers Equity Co.-op. Elvtr. Co. is returned marked "Dissolved."

Walum, N. D.—Mail addressed to the Farmers Elvtr. Co. at this point is returned marked "Elevator closed."

Gladstone, N. D.—Julius Hollst, pioneer grain and lumber dealer at this point, died at Minneapolis, Minn., recently, at the age of 65 years.

Honeyford, N. D.—The Andrews Grain Co., which bot W. W. Erb's elevator, also the Thorpe Elvtr. Co.'s house, tore down the two elevators and its own house and built one good elevator from the material of the three former ones. It has a capacity of 30,000 bus.

Grand Forks, N. D.—New members of the Farmers Grain Dealers Ass'n of North Dakota are as follows: Farmers Supply Co., Elliott; Farmers Elvtr. Co., Hastings; Co-op. Elvtr. Co., Urbana (Spiritwood p. o.); Bremen Elvtr. Co., Bremen; Independent Elvtrs., Jamestown, and Farmers Elvtr. & Trading Co., Wild Rice.

OHIO

New Vienna, O.—The New Vienna Grain & Produce Co. is installing a new Sidney Vertical Feed Mixer.

Marysville, O.—On Feb. 11 windstorm damaged the buildings of O. M. Scott & Sons Co. and allowed rain to damage stock.

Norwalk, O.—The equipment of the Firelands Elvtr. Co. is being improved by the addition of a new Sidney Vertical Feed Mixer.

Circleville, O.—George Florence and Richard Simpkins have been appointed receivers for H. M. Crites Co., operating grain elevators in this state.

Duvall, O.—The L. J. Dill Co., doing a grain brokerage business at Columbus, O., is operating a portable sheller and loader here. Local margins on corn are down to 2 cents a bu. The company has been purchasing large quantities and probably, when the local crop is cleaned up, will move its portable sheller and loader into some other locality where it will interfere with established elevators.—R. H. Teegardin, Teegardin Grain Co.

Monette, O.—Wind damaged the roof of the elevator of the Ohio Farmers Co-op. Ass'n on Feb. 11.

Mentor, O.—The Painesville Elvtr. Co. has appointed A. L. Fenner, a resident of Mentor for the last seven years, manager of its elevator at this point.

St. Marys, O.—Ivo Klosterman, 21-year-old son of Frank Klosterman, of Montezuma, one of the partners of the St. Marys Grain Co., died on Feb. 27 from pneumonia, at a Dayton hospital.

Versailles, O.—The Citizens Elvtr. Co., recently organized, has taken over the defunct Versailles Equity Union Co., the receivers having disposed of the property to the new company, which will continue the business as before, dealing in grains, feed, coal, seeds, flour, salt and fertilizer. William Subler will continue as manager. The personnel of the new firm is as follows: Pres., Oscar Hoke; sec'y, Henry Martin; directors: O. A. Hoke, Peter Poly, L. C. Magato, J. P. Magato, S. J. Sheffbuch and Frank Hardman.

Cleveland, O.—The Lake Shore Grain & Seed Co., incorporated; capital stock, 250 shares, no par; incorporators: Albert M. Akers, pres.; C. E. Phillips, vice-pres., and L. Washner. J. Burns Gunn is sec'y-treas. The new company has succeeded to the business of the Lake Shore Elvtr. Co., which recently filed an involuntary petition in bankruptcy, after doing business here for about 30 years. Mr. Akers will manage the business of the new company, and Ernest G. Hart, principal owner of the former Lake Shore Elvtr. Co., has been employed as sales manager. The company also handles feeds, wholesale and retail.

OKLAHOMA

Binger, Okla.—W. L. Ficklin has sold his mill to R. A. Sellars, who will operate it.

Alva, Okla.—It is rumored that the Farmers Elvtr. Co. may build a new elevator, duplicating the Union Equity Elvtr. in Enid.

Enid, Okla.—The Farmers Co-op. Grain Dealers Ass'n of Oklahoma will hold its annual convention in this city on Mar. 24 and 25. More than 300 delegates are expected.

Boise City, Okla.—E. E. and A. V. Ralston are now operating Ralston Bros. flour mill, which has been overhauled after a shutdown of three years. Feed will also be manufactured.

Beaver, Okla.—E. L. Gee has been appointed manager of the Wheat Pool Elvtr. here, succeeding R. Sampson. Mr. Gee has been connected with the pool in various capacities for about 10 years.

Cherokee, Okla.—It is reported that a new headhouse will be started soon on the site of the Cherokee Mills, operated by the Kansas Flour Mills Co., that burned Dec. 18. The headhouse will contain the equipment and machinery necessary to work wheat in and out of the huge concrete grain tanks left standing after the fire.

Hollister, Okla.—The elevator owned by G. G. Black and leased to the Oklahoma Wheat Pool Ass'n burned Feb. 20; loss, \$9,000; partly insured; about 1,000 bus. of wheat, valued at approximately \$500, was in the elevator at the time of the fire. Not even the records were saved. Mr. Black's son, Cecil Black, was employed by the pool to operate the elevator. The house will be rebuilt at once, it is reported.

PACIFIC NORTHWEST

Portland, Ore.—W. G. Sumpter has severed his connection with the Sunset Feed Co. of this city.

Ida, Ida.—On Feb. 22 the plant of the Colorado Milling & Elvtr. Co. was destroyed by fire of unknown cause.

Spokane, Wash.—Dewey Leach, local manager for Kerr Gifford & Co., who broke his leg several weeks ago, is now able to be about, aided by a cane.

Spokane, Wash.—The Farmers National Grain Corp. has placed C. E. Kyle, who has been employed in the local office, in temporary charge following the death of R. J. Stephens.

Marysville, Wash.—The Weeks Alfalfa Products Co., feed manufacturers, is branching out into a new field. It is manufacturing a new wheat cereal, with which it has been experimenting for some time.

Troy, Ida.—A portion of the warehouse, about 200 feet long, owned by the F. M. Green Grain Co. and the Idaho Bean & Elvtr. Co., fell to the ground on Feb. 7, from the weight of the snow on the roof. The warehouse was full of wheat at the time.

Spokane, Wash.—Richard J. Stephens, well known grain dealer of this city and manager of the Farmers National Grain Corp.'s local office, died on Feb. 22, from heart trouble. He was 61 years of age. He was pres. of the Pacific Northwest Grain Dealers Ass'n several times.

Valleyford, Wash.—The Boyd-Conlee Co., grain dealers, have purchased the elevator and adjoining warehouse here, together with all equipment, from Lamont L. Smith. The consideration was reported as \$4,500. The elevator and warehouse are on the Great Northern right-of-way.

Tekoa, Wash.—I. S. Woods, manager at this point for Strauss & Co., Inc., for the past 23 years, died Feb. 29, after an illness of two weeks. About a week before his death Mr. Woods was operated on for tumor on the brain, but it proved unsuccessful. He was one of the best known grain buyers in this section.

Rathdrum, Ida.—The Rathdrum Grain & Supply Co., operating an elevator, feed grinding and seed cleaning facilities, and one of the oldest of the business concerns of this community, changed hands recently, M. B. Layton, chief owner for several years, retiring from the management after 25 years. The new manager is Earl Marsh, of Coeur d'Alene.

Cheney, Wash.—Clarence D. Martin, owner and manager of the F. M. Martin Grain & Milling Co. which was started by his father a quarter of a century ago, contemplates increasing the milling capacity of his plant 25% and doubling the storage capacity. The mill has a daily output of 4,000 sacks and 50 tons of millfeed. It has grain storage for about 400,000 bus., consisting of 18 concrete tanks, 90 feet high.

Seattle, Wash.—Recent new members of the Feed Dealers Ass'n of Washington are as follows: H. D. Danforth Co., Seattle; Toledo Milling Co., Toledo; Kelso Feed Co. (an old member re-instated); H. D. Gee, grain, Seattle (affiliated membership); Monnich & Ault, Touchet, hay shippers; International Agricultural Corp., address for this territory Seattle (affiliated); Webster-Brinkley Co., Seattle (affiliated). Application for membership has been made by Clarence Martin for his firm, the F. M. Martin Grain & Milling Co., Cheney.

**Specialists in Ventilating Grain Elevator
Legs and Grain Storage Bins**

HH ROBERTSON CO
BUILDING PRODUCTS

PITTSBURGH, PA.

District offices in Chicago, St. Louis, Minneapolis and other large Cities

ROBERTSON PROTECTED METAL ROOFING AND SIDING IS STRONG AND CORROSION-PROOF

GRAIN & FEED JOURNALS Consolidated

PENNSYLVANIA

Prospect, Pa.—J. M. Roth's flour and feed mill burned Feb. 18; loss, approximately \$18,000; no insurance.

Braddock, Pa.—Robert C. Sproul has been appointed trustee in the bankruptcy proceedings of Benjamin Golomb, doing business as the Braddock Feed & Supply House.

SOUTH DAKOTA

Nunda, S. D.—Berner Renaas has been appointed manager of Moeller & Son's elevator, succeeding F. H. Moeller.

Lane, S. D.—Following the recent death of his father, Harold May has been appointed manager of the Lane Farmers Elvtr. Co.'s elevator.

Conde, S. D.—A. A. Conley, agent for the Pacific Grain Co., is now manager of the Bullock Elvtr. Mr. Bullock has been dead for some time.

Yanka, S. D.—For the first time in many years, wheat has been delivered to the Farmers Elvtr. Co.'s elevator this winter by means of bob-sleds.

Wessington Springs, S. D.—Frank Jensen has succeeded W. F. Caldwell as manager of the Jerauld County Farmers Union's elevator, the latter having recently resigned.

Iroquois, S. D.—Fred Moeller, manager of the Farmers Elvtr. Co.'s elevator, lost two sons in an auto accident late in January. One of them, Leo, was his father's second man at the elevator.

Letcher, S. D.—Conrad Murphy has been appointed manager of the Farmers Elvtr. Co.'s elevator, succeeding Bert M. Halladay, who has become manager of a farmers elevator at Oakton (Davenport p. o.), Ia.

Brookings, S. D.—Nine blank company checks were stolen from a check book of George P. Sexauer & Son recently, a fictitious name signed to them and they were cashed for different sums, from \$10 to \$20, in a neighboring town.

Thomas, S. D.—B. Renaas, who has been in charge of the elevator at this point since last fall, has obtained a position in an elevator at Nunda, where he will have full time employment. The Thomas elevator has been open for business only two days a week.

Willow Lake, S. D.—The new Farmers Elvtr. Co.'s elevator (described in detail in the Dec. 9 Journals) has been completed by the T. E. Ibberson Co. and turned over to the company. George B. Lee has been appointed manager. The company's former elevator burned last September, as previously reported.

SOUTHEAST

Haleyville, Ala.—Jack Donaldson has opened a grist mill and feed store.

Chipley, Fla.—The Huges-Law Lbr. Co., located one mile west of this point, has installed a grist mill in connection with its lumber plant.

Old Fort, N. C.—Sycamore Mills, Inc., incorporated; capital stock, \$50,000; incorporators: D. W. Adams and C. V. Grant. Early last December Mr. Adams was reported as rebuilding a burned feed mill at this point, on Mill Creek.

Birmingham, Ala.—A wholesale, feed, flour and grocery business has been opened by the Smith Grain & Grocery Co., A. E. Smith manager.

Tampa, Fla.—The writer, who has had a good many years' experience selling foods and feeds to the wholesale trade, has only recently organized the Wholesale Brokerage Co. We are interested in selling grain and grain products to the wholesale trade on a commission basis, including wheat for poultry feed.—Wholesale Brokerage Co., by S. R. Pearson, mgr.

Ft. Worth, Tex.—The Henderson Grain Co., grain brokerage concern with headquarters in this city, is reported to be insolvent. Gerald C. Henderson is a member of the Chicago Board of Trade.

Honey Grove, Tex.—Jess A. Smith's corn mill and sheller, located on the Santa Fe, burned Feb. 17; loss, \$9,500; partly insured. The mill had not been operated for about two years, and it is thought that tramps may have sought shelter in the building and carelessly set fire to it.

WISCONSIN

Delavan, Wis.—A flour mill has been installed by the Hetzel Milling Co., which will manufacture wheat, rye, graham and buckwheat flours.

New Richmond, Wis.—The New Richmond Roller Mills Co. plans to rebuild its large warehouse that burned last fall. The new structure will be on the same site as the old.

Milwaukee, Wis.—Maxwell G. Marshall, sec'y of the E. B. Marshall Co., dealer in stock foods, died recently at his home in Wauwatosa, after a short illness. He is survived by his widow.

Books Received

REVIEW OF THE CROP YEAR is the 8th annual review and covers the crop year August-July, 1930-31. The world's wheat situation is analyzed for convenient statistical reference. By the Food Research Institute of Stanford University, California; 132 pages, 61 charts, 44 appendix tables; price, \$2.

COMMERCIAL FEEDING STUFFS, Texas Agricultural Experiment Station, College Station, Brazos County, Tex., covers the results of analyses and inspections of commercial feeds in Texas from Sept. 1, 1930, to Aug. 31, 1931. Likewise it shows definitions and standards, definitions of special-purpose mixed feeds, the Texas feed law, protein contents of cottonseed products sold in the state and other helpful information.

CORN BORER IN WESTERN NEW YORK.—A preliminary report on the status of the European corn borer estimates the progress of the infestation since 1919. In 1926 practically the whole of New York state and one-half of Pennsylvania had become infested. From an infestation of 242 larvae per 100 plants in 1926 the infestation dropped 72 larvae per 100 plants in 1929. By Entomologists Bartley and Scott of the U. S. Dept. of Agriculture. Circular No. 197, 21 pages.

INTERNATIONAL YEAR BOOK OF AGRICULTURAL STATISTICS is a comprehensive volume of 830 pages giving statistics for 220 countries, with the available data and a series of tables for 50 countries on the different crops. Weekly price quotations are given on 25 agricultural products on the principal world markets for 1913 and the period January, 1927 to July, 1931. Freight rates and the rate of exchange are given. Published by the Institut Internationl d'Agriculture, Rome, Italy.

RESULTS OF SEED-TREATMENT EXPERIMENTS with Yellow Dent Corn, by James R. Holbert, Senior Agronomist, Bureau of Plant Industry, and Benjamin Koehler, Illinois Agricultural Experiment Station, discusses seed-borne diseases and related maladies, materials and methods for treatments, disinfectants, comparisons of commercial dusts, and the effects of treatment on yield. Experiments have been conducted for 11 years at the beginning of which period liquid treatments were found more effective than available dust treatments. Since then dust treatments have entirely displaced liquid treatments. Suitable corn-seed dust disinfectants are effective in controlling such infections of Diplodia and Gibberella as occur in well-selected seed and aid in controlling other seed-borne and soil-borne diseases. Technical Bulletin No. 260, U. S. Department of Agriculture, Washington, D. C. Price, 20 cents.

FORT WORTH

*Is the Better Grain Market — Use It and Profit
Try any of these Grain and Cotton Exchange Members:*

James E. Bennett & Co.
Grain, Provisions, Stocks

Smith-Ingraham Grain Co.
Export and Consignments

Transit Grain & Commission Co.
Consignments, Brokerage

Rosenbaum Grain Corp.
Cash and Futures

Grain Carriers

Washington, D. C.—The railroads have applied to the Reconstruction Finance Corporation for loans aggregating \$221,579,000.

Bloomington, Ill.—Additional transit privileges have been granted soy beans at Bloomington under the Alton Railroad Co.'s tariff 1570-K, effective Mar. 18.

Since Aug. 1 definite rates from Sioux City in all directions have prevailed. With the old rates restored Jas. C. Mullaney says that shippers will be confronted by the task of figuring transit balances.

Lincoln, Neb.—The Nebraska State Railroad Commission has ordered an increase in the intrastate rates on grain corresponding with the increase made Feb. 20 by the Federal Commission in compliance with the Supreme Court ruling.

Kansas City, Mo.—The Farmers Union, the Wheat Pool and five other farm organizations will join in a petition requesting the Interstate Commerce Commission to reaffirm its previous rate reduction order set aside by the Supreme Court.

Freight car loadings, altho less than a year ago, are showing increases over preceding weeks. Grain and grain products loaded during the week ending Feb. 13 amounted to 32,023 cars, against 41,279 and 44,734 during the like weeks of 1931 and 1930.

Mt. Vernon, Ill.—The Jefferson & Southwestern R. R. Co., between Mt. Vernon and Nason, quit operating Feb. 29. A petition for its abandonment is before the Interstate Commerce Commission. Grain elevators in that territory are served by other lines of railroad.

Fort Worth, Tex.—A hearing will be held by the Interstate Commerce Commission at the Texas Hotel Mar. 21 to consider a rule permitting the mixture of grains originating at Texas points with grains moving interstate, the rule having been suspended at the request of the Oklahoma Corporation Commission.

Regional shippers' advisory board meetings will be held Mar. 15 at Columbus, O., by the Ohio Valley Board; on Mar. 16 at Boston by the New England Board; Mar. 16 at Kansas City by the Trans-Mo. Kan. Board; Mar. 23 at Toledo, O., by the Great Lakes Board, and Apr. 7 at Chicago by the Mid-West Board.

Portland, Ore.—Rates by boat from the Columbia River and Puget Sound will be increased effective Mar. 15 by the Pacific Coastwise Conference of shipowners. The new rates are: Sacked wheat—100 ton minimum, to San Francisco, Oakland, or Alameda, 12½ cents; Wilmington, Long Beach and San Diego, 17½ cents. Bulk wheat—500 tons minimum: to San Francisco, Oakland or Alameda, 10 cents and 11¾ cents; Wilmington and Long Beach 12½ and 14¾ cents; San Diego, 15 and 17½ cents.

Omaha, Neb.—The main objection to a restoration of the intrastate rates in force prior to August 1, 1931 is the fact that under the present very much lower schedules the commercial truckers have developed a large business in buying grain direct from the farmers in one part of the state and selling direct to feeders in other districts, leaving the elevators and railroads out of the picture. Raising these intrastate rates 25 per cent as done Feb. 20 will make Nebraska a truckers' paradise and will greatly enlarge their operations over our highways with greater loss of business to shippers and the railroads.—J. N. Campbell, sec'y Nebraska Grain Dealers Ass'n.

Decisions and New Complaints

Before the Interstate Commerce Commission:

No. 25050. Red Star Milling Co., Wichita, Kan. Against refusal of Santa Fe to absorb switching charges on wheat at destination points.

No. 24634. Lathrop-Marshall Grain Co. v. A. T. & S. F. By Examiner Leland F. James. Dismissal proposed. Rate, wheat, Kansas City, Mo., to Auburn, Ky., not unreasonable. Two shipments found to have been misrouted by the L. & N. without resultant damage.

No. 24527. Rudy-Patrick Seed Co. v. A. T. & S. F. et al. By Examiner C. Garofalo. Dismissal proposed. Carload of sudan grass originating at Muleshoe, Tex., with transit at Plainview, Tex., and Kansas City, Mo., to Buffalo, N. Y., undercharged in amount of \$18. Applicable charges not unreasonable.

No. 22934. North Pacific Millers' Ass'n v. C. M. St. P. & P. By division 4. Complaint dismissed. Complainants' contention that the export demurrage tariff is applicable, and that, if not, the applicable domestic demurrage tariff is unreasonable and unduly prejudicial to complainants and unduly preferential of interior mills, as applied to shipments of wheat to complainants' tidewater mills at Seattle and Tacoma, Wash., found not sustained.

No. 22821. General Mills, Incorporated, successor to Red-Star Milling Co. v. C. R. I. & P. By Examiner C. J. Peterson on rehearing. Original report, 168 I. C. C. 599. Dismissal proposed. Shipments of wheat from points in Kansas to Wichita, Kan., there milled into flour and the product reshipped to Galveston, Tex., for export, found to have been subject to interstate rates from points of origin to Wichita. Rates charged found inapplicable. Applicable rates were 20 cents from Ford, Kingsdown, Bloom, and Mineola, and 20.5 cents from Fowler and Plains. Collection of any undercharges that may be outstanding now barred under section 16 of the act.

No. 23350. Public Utilities Commission of the State of Idaho v. O. S. L. By division 2. Report by Chairman Porter. Rates, dried peas and beans, points in Idaho on the Ore-

gon Short Line to points west of the eastern shore of Lake Michigan, including points in northern Michigan, the eastern boundaries of Indiana and Kentucky, the western boundary of Tennessee and the eastern boundary of Mississippi, excepting points in Arizona and New Mexico, not unreasonable or unduly prejudicial, with exceptions, as follows: To Butte, Mont., and Reno, Nev., rates are and will be unreasonable to the extent they exceed or may exceed, 85 cents to Reno, minimum 40,000 pounds, 43 cents from Idaho Falls and points taking the same rates and 60 cents from Twin Falls and points taking the same rates, to Butte; defendants, the report said, would be expected to reduce as-sailed rates to other destinations in mountain-Pacific territory where necessary to accord with the rates shown in this report: To Cheyenne, Wyo., and states hereinafter named, east and southeast of Idaho, to remove undue prejudice to Idaho and undue preference for Colorado, rates are to be made arbitraries over Colorado points—to Minnesota, Wisconsin, northern Michigan, Iowa, Missouri and Illinois, 35 cents over Greeley, Colo., and 15 cents over Grand Junction, Colo., to points in South Dakota, Nebraska, Kansas and Oklahoma, 20 cents over Grand Junction; and to Cheyenne, 15 cents over Grand Junction, no changes being required in relation to rates from Greeley. New rates are to be effective not later than May 20.

Are Trucks Taking LCL Business?

In the seed report of the U. S. Bureau of Agricultural Economics issued Feb. 25 are a few lines demonstrating as clearly as may be what government regulation has done to the railroads, pointing a warning to every trade that has not yet felt directly the yoke of bureaucracy:

Orders being received were mostly for small lots, which were being shipped nearly entirely by truck from one market. In another market, truck transportation was restricted by the heavy condition of side roads.

With an Interstate Commerce Commission setting 10 cent minimums, government road building projects creating pork barrels and laying concrete to help competition, 30 day prior publication of tariff changes, can the railroads hope to hold package trade in the face of trucks operating free of governmental interference?



SEND FOR YOUR COPY

of the most complete authoritative grain drying catalog ever published. No man operating a Grain Elevator or Mill, can afford to be without this book. All Engineering and Construction Companies should have it on file as a reference book. Your library is not complete without a copy. Write today for yours.

O. W. RANDOLPH CO.
TOLEDO, OHIO, U. S. A.

Supreme Court Decisions

Digests of recent decisions by State and Federal Courts involving rules, methods and practices of the wholesale grain, field seeds and feedstuffs trades.

Brokers.—Where broker promptly forwarded to both principals written memoranda of purchase and sale contract, and seller retained notice without demur, parol evidence was inadmissible to show broker's lack of authority.—*Frey & Son v. Magnes*. *Court of Appeals of Maryland*. 157 Atl. 400.

Time for Filing Claim.—“Reasonable time for delivery” within B/L requiring claims for loss within six months thereafter means time necessary conveniently to transport and make delivery in ordinary course of business (Interstate Commerce Act § 20 (11), as amended, 49 USCA § 20 (11).—*C. & O. Ry. Co. v. Martin*. *Supreme Court of the United States*. 51 Sup. Ct. Rep. 453.

Sale Closed by Delivery without Confirmation.—Order obtained by salesman for goods to be delivered in installments, with provision making order subject to seller's written approval, held binding contract on delivery and acceptance of first installment, without seller's communicating confirmation.—*Pillsbury Flour Mills v. Independent Bakery*. *Supreme Court of Washington*. 5 Pac. (2d) 517.

Routing.—Shipper could not complete incomplete routing shown in tariff where not followed by words “and lines beyond,” where throughout tariff, incomplete routings were so supplemented. Birmingham, Ala., held not “directly intermediate” between shipping point in Nebraska and Vicksburg, Miss., under tariff; words quoted suggesting point on route reasonably direct from point of origin to specified destination.—*Updike Grain Corporation v. St. Louis & S. F. Ry. Co.* *U. S. Circuit Court of Appeals*. 52 Fed. (2d) 94.

Seedsman Protected by Non-Warranty Clause.—Where celeriac seed was sold as celery seed and package had nonwarranty clause printed upon it, and there was custom of nonwarranty, refusal to warrant held valid (Comp. Laws 1917, §§ 5123, 5180). The nonwarranty clause stated, in substance, that nursery company gave no warranty, express or implied, as to description, quality, or productiveness, or any other matter, of any seed sold, and that, if purchaser did not accept them on those terms purchaser must return seed at once, and that any money paid would be refunded.—*Hoover v. Utah Nursery Co.* *Supreme Court of Utah*. 7 Pac. (2d) 270.

Indemnity Against Thresher's Lien.—Judgment upholding thresher's lien in conversion action against elevator company constituted breach of indemnity undertaking given elevator company on sale of grain. That the facts in this case establish a breach of a condition of the undertaking in suit so as to render the principal and sureties thereon liable. Where grower's judgment creditor executed bond to indemnity against thresher's liens to induce elevator company

to make payment for grain, there was consideration for undertaking.—*Farmer's Co-operative Elevator Co. of Dodge v. Schweiger-Ewald Lumber Co. of Hebron*. *Supreme Court of North Dakota*. 233 N. W. 902.

Sale of Mortgaged Crop.—Duly recorded chattel mortgage was constructive notice to and binding upon purchasers of mortgaged property from mortgagors. Where mortgagor gives mortgagor oral authority to sell mortgaged property, bona fide purchaser acquires good title, regardless of his knowledge of mortgage.—*Mitchell v. Mason*. *Supreme Court of Arkansas*. 44 S. W. (2d) 672.

Default in Contract of Sale.—Contract for sale of 2,000 bags of corn chops to be delivered and accepted between certain date, giving buyer right to order delivery in portions, and requiring seller to ship within 14 days after receiving instructions, held entire and not separable. Where buyer first defaulted and was in default when seller failed to perform on time, buyer could not terminate contract. Party, when in default, has no power to say contract is at end, and refuse to proceed with its execution. So long as party originally in default has not altered his position in reliance upon apparent intention of party not in default to treat contract as in effect, latter may change his position and treat contract as discharged. Where seller waived buyer's breach of contract, seller could withdraw waiver upon buyer's refusal to further proceed; buyer not having altered position in reliance on waiver.—*Meyer Milling Co. v. Baker*. *Supreme Court of Missouri*. 43 S. W. (2d) 794.

Farm Relievers Unloading Frozen Assets on Government

What is to be done about the National Cheese Producers' Federation, in Wisconsin, which about two years ago borrowed \$300,000 from the Federal Farm Board? They have lost this money in operation and as much more besides.

The manufacture of cheese is the principal industry in Wisconsin, and the state has an international reputation for that product. At this time the entire state is in a ferment of dissatisfaction.

Out in northwestern Nebraska, generally known as the sand hills, is a promoted concern called the North Platte Valley Co-operative Cheese Co. There are five factories in this lineup, but only one of them is in operation, the others being closed. This concern was badly in debt. The creditors were crowding, and a forty-thousand dollar loan was obtained from the Federal Farm Board, running five years at one per cent interest per annum. How the proceeds of this loan were used is the interesting part:

We are told that Alexander Legge had a private loan of five thousand dollars made to the company two years prior. This loan was repaid. The manager of the institution, Mr. Warner, evidently had eighteen thousand dollars coming to him, money that he had advanced, and he was paid. The balance of the federal loan was applied on the indebtedness at the bank.

Truly, Little Orphan Annie herself has nothing on Uncle Sam when it comes to being downright generous on occasion.—*Federated Agricultural Trades*.

Grain Claims Bureau, Inc., Box 687, Station A, Champaign, Ill.

Freight claim audits of your account sales returns three times per year will save you several dollars in a year's shipping. Audits on a percentage basis only, no other costs. A trial is solicited.

W. S. BRAUDT,
AUDITOR AND TREASURER.

Time of Shipment

Grubb Grain Co., Topeka, Kan., plaintiff v. Gillette Grain Co., Nashville, Tenn., defendant, before Arbitration Comite No. 5 of the Grain and Feed Dealers National Ass'n, composed of R. A. Jeanneret, F. A. Derby and Lester Stone.

During the month of August, 1931, the plaintiff sold to the defendant three cars of No. 2 white corn and two cars of No. 2 yellow corn, the plaintiff having used regular form of confirmation, specifying time of shipment in a certain number of days, and the defendant having confirmed the transactions by letter and in each case specifying the number of days in which shipment was to have been made.

There is no point of difference between contesting parties except on the question of whether or not shipments tendered in fulfillment of these contracts were made in contract time. The plaintiff submits evidence showing that shipments were made from country points within the contract period, and argues that his obligation was therefore properly discharged and that the time of inspection or passing Topeka, Kan., is not to be considered. The defendant argues that the shipments should have been made from a terminal market within the contract period and quotes the following rules in support of his contention:

Rule No. 25 provides: “Terminal Market Sales: Sales made out of any terminal market for a specified number of days shipment shall be filled with shipments from the point from which sold, unless otherwise agreed or understood at the time of trade.”

Rule No. 5, Paragraph No. 3 provides: “Grain to apply on a sale for shipment must be actually loaded, and billing instructions must be furnished the railroad company in accordance with the custom then in vogue at shipping point.”

The question left for this Comite to decide is whether or not shipments from country points during the life of these contracts were applicable in fulfillment thereof.

It is the Comite's decision that under the terms of these contracts the plaintiff was not obliged to make shipment from a terminal market, and that Rule No. 25 cited by the defendant has reference only to sales made from a terminal market. In this case the sale was made at Topeka, which is not a terminal market. Therefore, the provisions of Rule No. 25 are not applicable.

As for Paragraph 3 of Rule No. 5, the Comite finds that the grain in question was actually loaded and billing instructions were furnished the railroad company in accordance with the custom in vogue at the shipping point.

We therefore, find for the plaintiff in the sum of \$529.20 and assess costs of arbitration against the defendant.

The National Ass'n of Operative Millers will hold its annual meeting at Louisville, Ky., May 19 and 20.

Draft Bonds

provide protection against losses on Draft proceeds, caused by bank failures.

For information, write or wire

Wirt Wilson & Company

General Insurance

Builders Exchange Building
Minneapolis, Minnesota

Supply Trade

Sidney, O.—The Sidney Grain Machinery Co. has been appointed state distributor for the Texas Cyclone Sweet Feed Mixer.

Houston, Tex.—Mente & Co. are constructing a new building which will add approximately 50,000 square feet to their facilities here.

Champaign, Ill.—W. Z. Black, H. L. Gates and E. L. Johnson will form a company for the manufacture and sale of equipment to handle grain thru an elevator by air.

Kansas City, Mo.—E. J. Hammer, eight years with the Howe Scale Co., here and three years at Dallas, is now in charge of the Kansas City branch. All side lines have been discarded and the shops completely equipped for prompt scale service.

New York, N. Y.—A wage reduction averaging 25% and affecting 115,000 organized workers in the building trades will go into effect in New York City May 1. Bricklayers are cut from \$15.40 to \$12 per 8-hour day. Since 1913 the cost of living has increased 50% while the wage has increased 176%.

Employees of the General Electric Co., who since Nov. 1, 1931, have been contributing 2% of their average full-time earnings toward the relief of part-time workers and the unemployed within the company, will have but one per cent deducted from their pay, starting March 1, according to announcement by Pres. Swooe.

Akron, O.—Diamond Rubber Co. has just placed on the market Griptite, a newly developed dressing for rubber belting. It is claimed this dressing is not greasy, not inflammable and is not harmful to belt or pulley, and that immediately upon application it doubles the pulling power of the belt and its effectiveness increases with use.

Ithaca, N. Y.—Morse Chain Co. has been appointed exclusive sales agents for Morse Pullmore Clutches, manufactured by the Rockford Drilling Machine Co. This sales arrangement is made to avoid duplication of sales efforts as the Morse Industrial Sales division specialize on power transmission units.

Kansas City, Mo.—H. C. King of the Sunflower Chemical Co. has succeeded V. L. Fulkerson as manager and shortly will be in position to supply all users of insecticides regardless of the quantity wanted. Mr. King has long been interested in the elevator trade having served with Jno. S. Metcalf Co., Burrell Engineering & Cons. Co., and Otto Lehrack Co. The Sunflower Co. is enlarging its line to include all agricultural chemicals and insecticides. The general offices and factory of the company have been moved to 16th and Swift Ave.

New York, N. Y.—The American Leather Belting Ass'n has decided that for the greater protection of the consumers of leather belting, it should establish and sell this commodity by specifications of thickness instead of weight, thereby discarding the old weight terminology of "ounces per square foot" which may be varied by the mere addition of weighting materials to the leather, and does not necessarily always represent a differential in transmission values. Inasmuch as leather belting prices are based on thickness, the simplicity and common sense of this change has met with the instant approval of both manufacturers and users of leather belting. It simplifies and makes comparatively easy the checking of each piece of belting to see if the average thickness is as ordered. The new standard

thickness went into effect Mar. 7 and should be used by all buyers of belting in wording their orders. Every order for single or double should specify the thickness on the order. If just the words "Light," "Medium," or "Heavy" appear on the order these words now mean the thickness as per the new standard and not the weight as formerly.

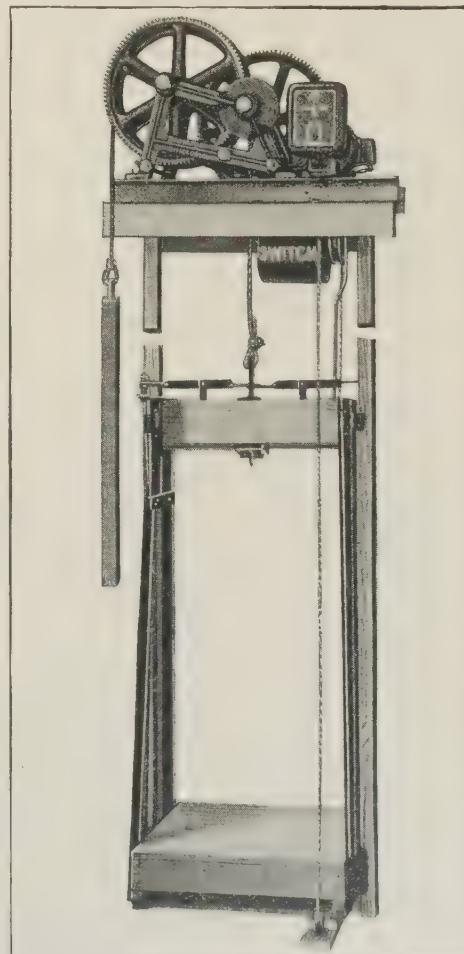
World's Storage Elevators Will Be Built In North America

By C. D. Howe

The carry-over situation has had a great deal to do with the expansion of storage space at Ft. William during the last five or six years, during which time 40,000,000 bus. of storage space has been built. Should future years bring increasing Canadian carryovers, it seems probable that additional storage space will be built, but if the hopes of the producers are realized for a rapidly reduced carryover, the Head of the Lakes is now over-built with grain storage.

Canada and the United States are the only two countries in the world that have a complete bulk handling system for grain, and consequently they are the only two countries that are capable of storing large quantities of grain without loss through damage. In any other country storage means piling up grain in sacks under canvas.

It seems probable, therefore, that North America will continue to carry the world's stock of wheat, and that other countries will continue to dump their wheat at prices below ours to avoid carryover. Therefore, I believe that the storage capacity here will continue to be used, and probably continue to be extended.



Electric Safety Manlift

An Electric Safety Manlift

A passenger lift having the economy of the hand powered lift and the convenience of the full size elevator has been made available thru the enterprise of B. B. Gemeny, long identified with grain elevator construction, who has arranged for the manufacture of the machine.

So compact is the mechanism that it can be installed in connection with any hand power manlift now in place. The car is raised by a cast steel wire rope $\frac{3}{8}$ inch in diameter, having a breaking stress of 18,000 lbs., and passing over a 17-inch sheave, which is driven by a Star Hoist Motor of $\frac{3}{4}$ h. p., of the totally inclosed ball bearing type, taking current at 220 volts, 3 phase.

The starter has a dust-tight inclosure, and the drum switch has an overload relay. A motor brake is built in to retard momentum of motor and gears. Roller bearings and hobbed cut gears make the mechanism up-to-date.

An automatic brake on the countershaft prevents car moving up or down when motor is not running, or from traveling faster than 100 ft. per minute, regardless how unbalanced the load. A magnetic brake is provided for the motor. The car is of steel and wood or all steel if desired. The guides are $1\frac{1}{2} \times 1\frac{1}{2}$ inch hard wood. Installation is made easy by shipping the head drive completely assembled.

Safety is the word appropriately applied to this machine. If the cable breaks, a drop of only one inch clamps platform of car to guides. If the switch cable breaks when car is going up a strike plate on car head frame contacts hanging rod on a switch sheave that automatically throws switch to neutral. If car is coming down the platform will strike bottom with no more force than jumping off a stool 10 in. high. If the counterweight breaks loose or the cable jumps the sheave the platform clamps automatically. If overloaded, after two minutes the starter automatically throws out, when it is necessary to push button on starting box before motor will start again. It will operate with a 50 per cent overload without stalling motor. The freedom from severe jarring when starting and stopping is appreciated by riders.

Additional information will be furnished to readers of the Journals on application to the manufacturer, D. A. Matot.

Open interest in Chicago wheat futures continues to increase, standing at 125,604,000 bus. Feb. 29, against 112,076,000 bus. Feb. 2.

Insurance Notes

Lansing, Mich.—"Regulations of the State Fire Marshal for the Prevention of Fire" have been published in a booklet of 42 pages by C. D. Livingston, state Commissioner of Insurance, and contains valuable suggestions on handling of gasoline and naphtha, bulk oil storage plants, electrical wiring and other fire hazards.

F R E E



With each order for a fire barrel we will send you, free, a hydrometer for testing fire barrels containing calcium chloride. It is imperative that the contents of your fire barrel be tested occasionally.

Remember, too, that prices on fire barrels have been materially reduced. Ask for details.

Carbondale Fire Protection Co.
Carbondale, Penn.
Shipping Points—
Peoria, Ill., and Carbondale, Pa.

Field Seeds

Providence, R. I.—Edw B. Williams, pres. of the W. E. Barrett Co., died recently.

Manteca, Cal.—A. S. Paul has opened the Manteca Cash Seed Store, handling field seeds in bulk.

Oskaloosa, Ia.—The N. H. Krizer seed corn drying plant suffered \$12,000 damage by fire last month. Partially insured.

Boston, Mass.—Jelle Roos, of Sharon, is moving its head office to Boston and will add a complete line of seeds to its other extensive business.

Louisville, Ky.—The Orchard Grass Seed Cooperative has installed new cleaning and conveying machinery for cleaning orchard grass seed.

Ordway, Colo.—Hosler Seed Co. properties have been purchased by A. R. Bish Coal & Feed Co. of Rocky Ford. Ralph Kipper has been placed as local manager.

Memphis, Tenn.—Otto Schwill & Co., one of the oldest seed companies in the South, filed a bankruptcy petition giving liabilities at \$58,444 and assets at \$82,742.54.

Waupaca, Wis.—Andrew R. Potts, 78, recently honored by University of Wisconsin for outstanding experimental work, died at his home recently of pneumonia.

Hartford, Conn.—Dr. D. F. Jones of the Connecticut Experiment Station, has developed Spanish Gold, a new sweet corn reputed to rival Golden Bantam, but harder and earlier.

Philadelphia, Pa.—H. F. Mitchell, 70, founder and head of Henry F. Mitchell Co., seed dealers, died suddenly at Atlantic City, Feb. 20. He is survived by his widow and two daughters.

Sioux City, Ia.—A federal feed and seed loan office is expected to be established here, where the drought regions of Nebraska, Iowa and South Dakota might be more conveniently served than from the Grand Forks, N. D., office.

Washington, D. C.—Funds have been raised by the American Seed Trade Ass'n which assure continuance of its Traffic Buro here until July 1, when provision can be made for making it a definite part of the ass'n activities, according to C. E. Kendel, sec'y.

Directory

Grass and Field Seed Dealers

CONCORDIA, KANS.

The Bowman Seed Co., wholesale field seeds.

CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

KANSAS CITY, MO.

Rudy-Patrick Seed Co., field seed merchants.

LOUISVILLE, KY.

Louisville Seed Co., seed merchants.

MILWAUKEE, WIS.

Courteen Seed Co., field seeds.

PHOENIX, ARIZ.

Capital Fuel & Feed Co., hay, alf., Berm., sor. seeds.

ST. LOUIS, MO.

Corneli Seed Co., field seed merchants.

Mangelsdorf & Bros., Ed. F., wholesale field seeds.

SEDGWICK, KAN.

Sedgwick Alfalfa Mills, field seed merchants.

WICHITA, KAN.

Ross Seed Co., Kansas Grown Alfalfa.

Buffalo, N. Y.—Daniels Seed Corp. has been incorporated by Clarence A. and Woodbury A. Daniels, and Fred B. Harwood, to deal in seeds of all kinds.

Annona, Tex.—The large cottonseed warehouse of the Texas Cotton Cooperative Ass'n was destroyed by fire recently, together with a large stock of choice seed.

Minneapolis, Minn.—Northrup, King & Co. have opened their Iowa branches located at Fort Dodge, Sioux City, Cedar Rapids, and Mason City, in preparation for the spring season.

Philadelphia, Pa.—David Burpee, pres. of the W. Atlee Burpee Co., is convalescing from a period in the hospital. Well on the road to recovery, he is expected back in his office in a few weeks.

Atlanta, Ga.—The Southern Seedsmen's Ass'n will hold its annual convention at the Biltmore hotel here, June 16-18, the last three days of the week preceding the annual convention of the America Seed Trade Ass'n convention, scheduled to be held in Chicago, June 21-23.

Lansing, Mich.—Markton oats, under trial at the Michigan State College for the past 3 years, are reputed to be so resistant to smut that it is unnecessary to treat the seed as a precaution. The straw is not so stiff as in Wolverine, and the variety is more apt to lodge on heavy soils.

Brookings, S. D.—The South Dakota Crop Improvement Ass'n has distributed thru the college extension service, a seed list showing the sources of over 1,000 lots of seed corn and seed grains, copies being given to all elevators, banks, newspapers, seed and feed loan com'tees, and others interested.

Manhattan, Kan.—The Kansas Crop Improvement Ass'n, meeting here last month, decided to certify Tenmarq wheat, which was developed at the state Experiment Station and is recommended for southern Kansas. While seed is not available for wide distribution, it is being placed with a few farmers this year, from which sources seed will be available later.

Fargo, N. D.—Tests with ammonium sulfocyanate as a weed killer have been successful, according to Dr. H. C. Hanson of the North Dakota Agricultural College. This by-product from coke plants is reputed to have advantages over sodium chlorate, being non-inflammable, having less toxic effect on the soil, and a taste which farm animals do not like. Soil bacteria are reputed to change it to fertilizer substances, one of which is ammonium sulphate.

Fort Wayne, Ind.—The K. & A. Seed Co., Inc., has succeeded the old firm of Kraus & Apfelbaum, Inc. it includes practically all the old personnel, to which has been added some of the outstanding men in the trade, giving the firm a larger financial setup and a larger field. The same commodities, seed, grain, feed, wool and coal are being handled, the company's line of elevators being continued, on a larger scale. Max Kraus, prominent official of the old company, is vice-pres. and general manager of the new.

Manitowoc, Wis.—Manitowoc County Pure Bred Pedigree Seed Growers Ass'n held its annual meeting here on Feb. 20, re-electing all old officers. They are John Kolb, Cleveland, pres.; Walton Morgan, Cato, vice-pres.; H. J. Weaver, sec'y-treas.

Union City, Ind.—A factory is being built and equipped here to manufacture various forms of plant insecticides and poultry remedies, pet remedies and allied products by the Central America Products, Inc. Opening is expected Mar. 15. Part of the distributing will be done thru a chain of seed and feed stores now operated by the company and expected to be expanded.

St. Paul, Minn.—J. W. Evans, seed grower of Montevideo, was re-elected pres. of the Minnesota Crop Improvement Ass'n at its recent annual meeting, when A. A. Riedesel, Windom, was made 1st vice-pres.; Herman Skyberg, Fisher, 2nd vice-pres.; H. B. Abrahamson, Dassel, and C. H. Lien, St. Cloud, directors for 3 years. Dr. Andrew Boss was re-elected sec'y, A. D. Haedecke, ass't sec'y and treas., and R. F. Crim, consulting agronomist.

Seed Movement in February

Receipts and shipments of seeds at the various markets during February, compared with February, 1931, in bus., except where otherwise noted, were as follows:

	FLAXSEED		Shipments		
	Receipts	1932	1931	1932	1931
Chicago	37,000	78,000			1,000
Duluth	15,499	57,983	72,677	127,248	
Ft. William	23,522	134,175			72,378
Milwaukee	1,430	2,860			
Minneapolis	97,860	367,950	44,960	160,680	
New York	60,000				
Superior	108	27,599			74,865

	KAFIR AND MILO			
	Receipts	1932	1931	Shipments
Hutchinson	206,700	102,700		
Kansas City	180,600	145,200	134,400	114,000
Los Angeles	149,500	22,100		
St. Joseph		1,500		
Wichita	1,300	9,100		3,900

	CANE SEED			
	Receipts	1932	1931	Shipments
Ft. Worth	94,900	61,100	2,600	2,600
Hutchinson	1,300	5,200		
Kansas City	8,050	24,150	3,200	1,150
Wichita		18,200		6,500

	SORGHUMS			
	Receipts	1932	1931	Shipments
Ft. Worth	427,000	180,600	189,000	12,600
Louisville	4,500	12,000		
New Orleans	2,800			

	CLOVER			
	Receipts	1932	1931	Shipments
Chicago, lbs.	1,818,000	1,093,000	1,037,000	1,052,000
Milwaukee, lbs.	144,810	49,140		428,420

	TIMOTHY			
	Receipts	1932	1931	Shipments
Chicago, lbs.	2,321,000	862,000	2,454,000	1,069,000
Milwaukee, lbs.	237,925			2,340

LOUISVILLE SEED CO.

BUYERS AND SELLERS

All varieties CLOVER, FIELD and GRASS SEED, SOY BEANS and COW PEAS
226 No. 15th St. LOUISVILLE, KY.
Long Dist. Phone 6727-6728



**CORNELIUS
KEYSTONE
SELECTED
CLEANED
TESTED
SEEDS**
**FIELD SEEDS
BUYERS & SELLERS
ST. LOUIS, MO.**

CRABBS REYNOLDS TAYLOR CO.
CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds
GET IN TOUCH WITH US

ED. F. MANGELSDORF & BRO.

Buyers and sellers of
Sweet Clover, Alfalfa, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

Standard Methods for Testing Seeds

At this season of the year thoughts of farmers turn to planting and their interest is closely followed by that of the dealers who will sell them seeds.

One of the ways in which dealers can create interest is by mailing samples to state seed laboratories for testing, or running germination tests themselves.

While standard methods for testing seeds are common knowledge among grain elevator operators, it can do no harm to briefly review the methods adopted by the Ass'n of Official Seed Analysts of North America and the International Seed Testing Ass'n, recognized as official.

Samples to be tested should be fairly representative of the entire lot of seed. Taking samples from all parts of the lot, mixing them thoroly, then drawing a sample from the mixture, will give a representative sample for testing.

At least 100 seeds should be used to make a fair test, preferably two or four such lots to strike an average representing the viability of the seed.

In counting germinated seeds, only those with normal roots and shoots should be considered, as these are the ones that would develop into normal plants in the field. Weak sprouts may or may not develop, hence would not be given more than 50% consideration under any circumstances.

The standard methods for germinating are, briefly:

BLOTTER TESTS: Alfalfa, clovers, wheat, oats, sorghum and certain grasses are readily germinated between folds of a 6x9 inch blotter, folded in the center, with the seeds placed on one half and the other half folded over to serve as a cover. Timothy, blue grass, red top, and flax also respond to this method. The blotters should be of such color that the sprouts show clearly, and the coloring matter must be insoluble and free from injurious chemicals that would interfere with germination or normal appearance of seed.

BELL-JAR AND CANDLE GLASS: Bent grasses and Bermuda grass respond best when placed on a moist substratum of blotter, cloth, or absorbent cotton and covered by a bell-jar. A modification is the candle glass, which is an ordinary tumbler, covered by a watch glass with a hole in the center, thru which the end of a wick passes and is spread back on the watch glass, then covered by a piece of filter paper which is kept constantly moist by the wick hanging in the water in the water tumbler. A watch glass may be inverted over the seeds to reduce evaporation.

RAG DOLL: A piece of cotton cloth, preferably lightweight canton flannel, about 10x27 inches, is used for large seeds like corn and beans. It is soaked with water and wrung out lightly, whereupon the seeds are distributed evenly over the center one-third, the two sides folded over the seed, and the strip loosely rolled, then placed in the germinating chamber.

PAPER TOWEL: Two or three layers of absorbent paper towel are dampened, the seeds distributed in the same manner as on a rag doll, the sides are folded over, but the strip is not rolled.

SOIL TESTS: It is often advantageous to test beans and some of the grains in soil or sand, since it supplies moisture uniformly and the spread of mold is lessened. Small cardboard boxes, about 6 inches square and 1 to 1½ inches deep are convenient for holding the soil. Equal parts

of soil and sand, or a sandy soil may be used, moistened to about 70% of its water holding capacity, which makes it sufficiently moist to hold together when pressed into a ball. Spread a layer ½ inch thick over the bottom of the box, distribute the seeds on this surface, cover with another ½ inch of soil and tap the box gently to settle. Usually it is not necessary to add more water.

DURATION OF TESTS: Time for completing a germination test under favorable conditions varies with different seeds from 6 days for corn to 28 days for blue grass. A preliminary count made when the seed is about half way thru the germinating period will indicate the progress of the test.

A germinating chamber, wherein the tests may be made under controlled moisture and temperature is preferable. Oats, wheat, alfalfa, clovers, germinate best in a constant temperature of 65 to 70 degrees F., while corn, sorghums, and most grasses prefer alternating temperatures of 65 to 70 degrees F. for about 18 hours and 85 to 90 degrees for the remaining 6 hours. Johnson grass and Bermuda grass respond best when the temperature reaches 95 to 100 degrees F. for about 6 hours of the day.

MOISTURE: This should be governed by the needs of the seed. Normally the material used for making the tests should be kept reasonably moist, but not so moist that a film of water forms around the seed to cut off air and cause rotting instead of germination. If the air is kept moist by a pan of water set inside the germinating chamber this will help promote the test.

GERMINATING CHAMBERS: Seed testing laboratories commonly use germinating chambers where they can keep temperatures, moisture and light under almost positive control. Likewise most state laboratories test seeds free of charge for residents of the state, or will make a certain number of tests free, then assess a nominal charge.

A germinating chamber, however, is not essential to making a seed test of reasonable accuracy. Most grain, feed and seed dealers have sufficiently favorable conditions in which to make tests so they can accommodate their patrons and build up good will without making excessive cash outlays.

Reconstruction Funds Available for Farm Loans

Of the \$2,000,000,000 aggregate appropriated by Congress for the Reconstruction Finance Corp. Act, \$50,000,000 have been allocated to the Sec'y of Agriculture for loans to farmers in all states except Connecticut and Pennsylvania, when financial help cannot be obtained elsewhere. Under the regulations loans will be made by representatives of the Department in each state for crop production purposes.

Connecticut and Pennsylvania are cut out because their state laws do not provide for crop liens, which are required security.

Henry S. Clarke, Chicago, has been appointed National Director of 1932 Crop Production Loans. Regional offices which will have charge of making loans are located at Spokane, Minneapolis, Dallas, St. Louis, and Memphis. Present seed loan Offices are expected to cooperate closely with this set-up but will devote most of their attention to collection of unpaid balances on the 1930 and 1931 loans.

Plant Experiments

No wheats surpassed common varieties of Turkey and Blackhull in variety tests conducted by H. H. Finnell at the Panhandle Experiment Station, Goodwell, Okla., during the period 1924-1930. Minhardi, Burbank, and Fultz made lower average yields. Varieties differed in response to preparation method, Minturki producing 114 lbs. more net grain per acre in continuous culture than alternating with fallow, Malakof producing 55 lbs. per acre more by summer fallowing. Blackhull consistently produced high proportions of grain to straw than any other variety. The protein content of all varieties averaged 14.15% on stubble and 15.54% on summer fallow. Differences in seasons and methods of culture affected protein content more than difference in varieties.

Selecting Seed from Silage Corn

Silage corn from Virginia seed and other southern sources matured on many Ohio farms last fall. Seed from this corn can be safely planted for a silage crop. In most cases, it will produce a crop slightly earlier than seed procured directly from the same southern source.

No fear need be felt in hastening development of these extremely late varieties by a few days, say agronomists at the Ohio Experiment Station. The high percentage of water in late corn when harvested gives it an unmerited appearance of superiority.

Professional seedsmen usually produce seed that will germinate satisfactorily. Furthermore, they usually eliminate diseased ears. Seed selected from southern corn should be tested to make sure it is viable. Light weight, discolored, and even slightly moldy ears should be discarded. With these precautions seed from silage varieties may be planted.

**Patents
Granted**

1,846,510. Process for Treating Seeds. Warren F. Busse, Akron, O. A method which consists in drying a quantity of seeds including "hard seeds", to render the same uniformly low in moisture content, employing artificially produced intense cold, and subjecting the seeds thereto, and subsequently permitting rise in temperature of the seeds, whereby the germinability of the "hard seeds" is augmented.

1,874,076. Animal Feed. Geo. M. Agee, Daviess, Ky., assignor to Anglo-American Mill Co., Owensboro, Ky. The method of preparing a sweetened food for live stock, which consists in continuously supplying animal feed and molasses at normal temperature to a receptacle having a suitable outlet, and stirring said materials to commingle the particles thereof and initially form a corrugated surface extending to the receptacle outlet, and which surface sets or becomes hardened, and subsequently forcing the commingled particles over said corrugated surface and thru the outlet, thereby generating heat which assists in effecting the mixture.

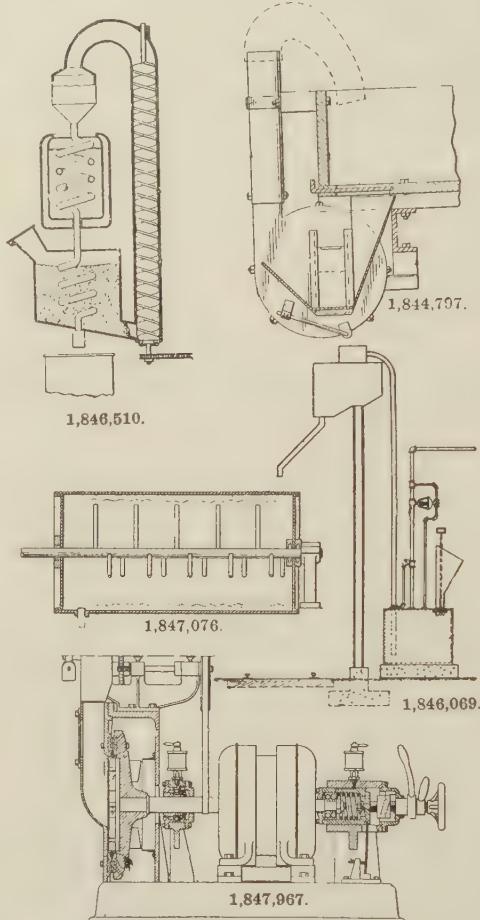
1,844,797. Grain Blower Unit. Emanuel J. and Geo. E. Schlechter, Whitetail, Mont. A grain suction unit for motor driven trucks that have a power take-off, said unit including a casing, a suction fan revolvable therein, an outlet stack for the casing, having an outer elbow and means for revolving the suction fan from the power take-off of the truck, a hopper fixed on one of the sides of the casing, said side of the casing having an opening therein in a line with the inclined bottom of the hopper, vertical guides on the casing at the sides of the opening, a slideable door movable in the guides, the bottom of the truck body having an opening above and communicating with the hopper, a slideable valve for regulating the opening, the second

side of the opening having series of apertures therethru and having a horizontal plate secured thereto, a channeled member

fixed to the plate for underlying the bottom beams of the truck frame and to be removably bolted thereto, a block on the side of the truck body with which the stack contacts, bolt members supporting the block, a strap around the stack through whose ends the bolt members pass, a brace rod removably secured to the horizontal plate and engaged by one of the bolts and said bolts having nuts screwed thereon.

1,846,669. Air Current Conveyor. Jas. B. Schaub, Wilmette, Ill. A system for conveying granular materials comprising a source of compressed gas, a forwarding chamber having conduits for conducting the compressed gas and for conducting the granular materials connected thereto, means for discharge at delivery end of conduit, and a pressure control valve intercepting the compressed gas conduit, said valve having operating means responsive to pressure variations within a chamber, the chamber of the valve having conduits connecting source of compressed gas and cavity of forwarding chamber thru a common control point.

1,847,967. Attrition Mill. Walter L. Keefer, Chambersburg, assignor to the Wolf Co., Chambersburg, Pa. In an attrition mill, a stationary grinding plate having an opening formed therein for the introduction of material therethru, an opposed rotating grinding plate, said grinding plates having grinding surfaces concentric with the opening and having a means diameter considerably greater than the diameter of the opening, the face of the stationary plate inwardly of its grinding face being smooth, the face of the rotating plate having substantially radial vanes for centrifugally feeding material to the grinding faces, the inner portion of the smooth inner face of the stationary grinding plate partially overlapping the outer ends of the radial vanes.



Samuel Townsend has been employed 52 years in the grain inspection department of the Philadelphia Commercial Exchange, having joined the department as a sampler in September, 1878. He is as alert and active as men 20 years younger.



HESS DIRECT HEAT DRIER AND COOLER—1000 Bushels Hourly
CONTINENTAL ELEVATOR, operated by Continental Elevator Co., Kansas City, Mo.

*Hess Driers Are Patented.
We Do Not Infringe Patents of Others.
We Guarantee This.*

**KANSAS CITY 1930
HESS DIRECT HEAT DRIER
Eagle Elevator**

Operated by Vanderslice-Lynds Co.

**KANSAS CITY 1931
HESS DIRECT HEAT DRIER
Continental Elevator**

Operated by Continental Elevator Co.

**KANSAS CITY 1931
HESS DIRECT HEAT DRIER**

Rock Island Terminal Elevators operated by Simonds Shields Lonsdale Grain Co.

The Satisfaction and Service Given by Hess Driers Has Always Been the Source of Our Business

WRITE US

HESS WARMING & VENTILATING CO.
1211 SOUTH WESTERN AVENUE
CHICAGO, ILLINOIS

HESS DRIER CO. OF CANADA, LTD.
68 Higgins Avenue, Winnipeg, Manitoba

Feedstuffs

Louisville, Ky.—Because many coal merchants also handle feeds Thomas J. Morrow, chairman of the 1932 convention of the National Retail Coal Merchants Ass'n, which will meet here May 19-21, is arranging for a feed expert to discuss merchandising feeds along with coal.

Galveston, Tex.—The annual convention of the Texas Cotton Seed Crushers Ass'n will be held here June 6-7. The Ass'n's directors have agreed to continue the two graduate fellowships in cottonseed research work at the Texas A. & M. College which it has carried for the past five years.

Nelson, Minn.—A. D. Johnson was made temporary sec'y-treas. by the officers and directors of the recently re-organized Independent Feed Dealers of the Northwest, the name of which has been changed to Northwest Feed Dealers Ass'n. A general meeting of the ass'n is contemplated for June.

Vancouver, B. C.—The Dominion Department of Fisheries has announced herring caught off any part of Vancouver Island may be used for making fish meal thru this season. Heretofore only herring caught off a small part of the west coast of the Island were permitted to be made into fish meal and oil.

Corvallis, Ore.—Mar. 17 has been set for the annual meeting of the Oregon Feed Dealers Ass'n at the Oregon State College. Its primary object will be discussion of the seed situation with college authorities. Authorities are likewise expected to express their views on the poultry and dairy industries.

Kansas City, Mo.—As a trade developer the Rudy-Patrick Co. is distributing bulletins announcing a letter writing contest, listing a new automobile as first prize for a letter not exceeding 100 words on "Why it Pays to Feed Oh-Boy Chick Starter," written on the back of the certificate which is being packed in each 100 lb. bag of the product.

Des Moines, Ia.—A convention of the American Stockmen's Supplies Ass'n met here Feb. 27, and reflected a spirit of optimism over the prospective business on mineral feeds and livestock remedies. Members sell these products direct, 2,000 salesmen are reputed to be active in Iowa alone. Representation at the meeting was from 10 middlewestern states and 20 manufacturing firms. New officers elected are Howard A. Marshall, Atlantic, Ia., pres.; F. A. Neitzel, Falls City, Neb., sec'y; E. F. Fox, Des Moines, Ia., treas.; J. W. Lusk, Quincy, Ill., Earl Rhine, Oelwein, Ia., and L. V. Hyde, Shenandoah, Ia., vice-presidents.

Feedstuffs Movement in February

Receipts and shipments of feedstuffs at the various markets during February, compared with February, 1931, in tons, were:

	Receipts	Shipments	
	1932	1931	1932
Baltimore	2,864	.....	.....
Chicago	24,714	29,149	57,638
Cincinnati	240	.....	.....
Kansas City	2,360	2,760	18,720
Los Angeles	116	73	.....
Milwaukee	785	30	5,760
Minneapolis	1,264	1,315	31,654
New York	180	.....	46,200
Peoria	11,760	16,780	11,948
San Francisco	312	.....	16,084
Seattle	4,590	7,110	.....

*Millfeed. †Bran and shorts.

Corvallis, Ore.—Willamette Valley feed and seed dealers will meet here on Mar. 17, to discuss mutual trade problems.

Soybean oil meal, properly supplemented with minerals, is a very valuable hog feed.—A. C. Smith, Archer-Daniels-Midland Co.

Syracuse, N. Y.—A business and luncheon meeting of the Northeast Feed Manufacturers Ass'n here Feb. 23 elected for the ensuing year W. S. Young, Waverly, N. Y., pres.; H. L. Hammond, Boston, Md., 1st vice-pres.; G. I. Godshalk, Bangor, Pa., 2nd vice-pres.; Floyd Dailey, Binghamton, N. Y.; sec'y-treas.; Lloyd Hedrick, Buffalo, N. Y.; Morris Hofficker, Lancaster, Pa.; L. S. Riford, Cayuga, N. Y., directors.

The Price Factor and the Local Grinder

A. C. Patzer, appearing before the annual convention of the Ohio Farmers Grain Dealers Ass'n, described his method of dealing with portable mill competition, the cut-price method. Simply because the company's grinding machinery had been charged off the books, it would seem that his directors backed him up in cutting grinding prices square in half, offering a rate that the portables could not meet.

This is regrettable, not only because it cuts his company out of revenue to which it is entitled by virtue of the service it presumes to give, but because it disturbs grinding prices and balance of trade among stationary grinders throughout the territory, fostering internal war within the ranks of the very people who should stand together for self-protection.

There are more ethical ways of fostering grinding trade. If service is improved beyond the ability of the itinerant grinder, if completed feeds are built and merchandised, or portable service extended to the patrons, there will be no need for cutting prices.

Chicago Delivery on St. Louis Millfeed Options

Chicago delivery on millfeed futures trades is contemplated in suggestions tentatively placed before the members of the St. Louis Merchants Exchange. The new standard middlings contract would be made operative Mar. 15. Among its clauses are:

Basis of Contract.—Track Chicago, freight prepaid—or less freight if not prepaid. The rules will provide that all deliveries on the standard middlings Chicago contract will require delivery at Chicago, protecting proportional rates to the East or South and lake-and-rail rates to the East via either Canada Atlantic Transport lines or Great Lakes Transit lines.

Time of Delivery.—At the option of the seller between first and twenty-fifth of the delivery month.

Methods of Delivery.—Seller making delivery to wire notice of intent to deliver within the period named, buyer to be allowed 24 hours to furnish instructions, or if instructions not received within the prescribed time shipment may be made to Chicago. Sellers required to make shipment within three days following receipt of instructions from buyer, complying with instructions of the buyer as to routing and size of cars.

Package.—All deliveries to be packed in new 100-lb. burlap sacks with tags attached giving name of manufacturer and guaranteed analysis.

Guaranty.—The seller guarantees the analysis of deliveries to conform with the definitions of the Ass'n of Feed Control Officials; and the merchantable condition of deliveries to the first destination beyond Chicago.

Oregon Dealers Protest Power Tax

A strong resolution opposing the power tax bill was sent to the National Ass'n by the Oregon Feed Dealers Ass'n assembled in a meeting at Portland late last month.

A report from the Milk Truck Delivery Com'ite showed progress in gaining the cooperation of the mills to discourage milk trucks taking feeds direct from the plant to the farmer, cutting out the feed dealer.

Sec'y Floyd Oles called attention to the investigations of the Washington Standards Com'ite, whose members were selected for their knowledge of feed ingredients and formulas. It supervises investigations of new products offered the feed trade, and its findings are published to members.

Synchronized Proteins

"Synchronized proteins," which refers particularly to the balance between the amino acids within the protein contained in a poultry or livestock food is the feed trades' answer to the axiom that nothing may stand still, it must move forward or backward, find new ideas, new materials, new methods and constantly develop them, or regress, unable to meet the competition of progress.

At least one large firm is making active use of the theory of balancing the amino acids of protein, not only thru experimentation in its own laboratories, and compounding formulas in accordance therewith, but by using in its sales one of the strongest arguments that has come to light in recent years.

Balanced amino acids are no longer just a theory. The work of the institution referred to is born out by the results of experiments at many of the experiment stations, and has won the approval of national authorities. Prof. F. B. Morrison, co-author with Prof. W. A. Henry, of *Feeds & Feeding*, speaking before the last annual meeting of the Eastern Federation of Feed Merchants, commented:

Only within the past few years has it been appreciated that the quality or kind of protein may be just as important as the amount. . . . Proteins are made up of 18 to 20 different . . . amino acids. From the standpoint of livestock feeding the important point is that some proteins contain all the known amino acids, while others lack certain ones. Some of the amino acids are indispensable in livestock feeding, for animals are unable to make these amino acids in their bodies from other nitrogen compounds. . . . If an animal is fed a ration in which the only source of protein is a highly purified protein which lacks one of these essential amino acids it will not be able to grow at all and eventually it will starve thru lack of the essential.

Some protein concentrates are already well balanced in their amino acid content, others lack sufficient quantities of essential amino acids. Such economies in feeding, such possibilities in nutrition exist in balancing amino acids that in the interests of the feeder, earnest study of this new factor, hailed as the greatest discovery since recognition of vitamins, cannot help receiving the honest approval of countless country elevator men who sell farmers their feeds and buy their grains.

Hay Movement in February

Receipts and shipments of hay at the various markets during February, compared with February, 1931, in tons, were:

	Receipts	Shipments	
	1932	1931	1932
Baltimore	.....	11	.....
Chicago	3,379	7,078	1,162
Ft. Worth	88	165	.....
Kansas City	20,352	17,280	11,142
Los Angeles	892	6	.....
Milwaukee	12	108	.....
Minneapolis	1,378	972	55
New York	289	.....	78
Peoria	200	140	140
Seattle	55	55	260

*Millfeed. †Bran and shorts.

Eastern Feed Dealers Find Definite Objectives Quickest Way to Results

The annual mid-winter convention of the Eastern Federation of Feed Merchants, held at the Hotel Onondaga, Syracuse, N. Y., Feb. 23-24, had for its important objectives:

To make a careful and complete analysis of the prevailing unsatisfactory conditions in the retail feed trade and to develop a definite corrective program.

To study the latest developments in feeds and feeding practices and to make it possible for merchants to confer with the foremost authorities regarding them.

To investigate existing and proposed laws which affect the retail feed trade and to take such action as may be necessary to protect the trade and promote its prosperity.

To provide an opportunity for retail feed merchants to meet and exchange promotional ideas.

Definite objectives are a sound aid to the building of any ass'n, because they concentrate ass'n activities along definite lines and direct them to accomplishments. They build membership thru giving the member and prospective member a sound reason for supporting its work. Evidence is found in the increasing attendance that has followed regular conventions of the Eastern Federation.

Max Cohn, who handled registration, says the latest was one of the best the organization has enjoyed in spite of unfavorable conditions.

TUESDAY MORNING SESSION

The meeting opened Tuesday morning with Pres. Fred M. McIntyre, Potsdam, N. Y., in the chair, disposing of the welcoming address and the appointment of com'ites before calling for the report of Sec'y W. A. Stannard, Albany, N. Y.

SEC'Y STANNARD outlined the activities of the ass'n during the past year, extolling the recently formed Board of Governors for New York, plans for creating similar boards to cover Pennsylvania and New Jersey, and the earnest work of officers and directors in promoting the interests of the membership.

PRES. MCINTYRE told about the hearing of the Federal Farm Board and its subsidiaries before the Senate Agricultural Com'ite (see Grain & Feed Journals, Dec. 9, page 649). His impression was that the com'ite is socialistic in nature, concerned with agriculturists west of the Mississippi river. Information, he contended, brought out that the Farm Board had only \$45,000,000 left on Nov. 1 out of the \$500,000,000 appropriated as a revolving fund, and that its loss mounted to \$185,000,000. Testimony, he said, demonstrated the Board has been detrimental to all interests concerned. Pres. McIntyre believed the Act contrary to the Constitution, but said the people must be aroused to the serious danger of growing governmental buros, growing government deficits, and increasing taxes if they are to rise in their might and correct evils that threaten.

DAVID STEENBERGH, Milwaukee, said five major problems now confront the feed trade; credit, small lot buying, price as a selling factor compared to quality, depression fear, and danger of speculating instead of merchandising. The future, however, looks bright.

Discussion of the Rutland Plan Milk Producers Ass'n for organizing the milk producers of the New York milk shed concluded the morning program. The plan contemplates organization of producers in townships and counties, welding these divisions into a state ass'n represented by a com'ite of 10.

TUESDAY'S LUNCHEON

Luncheon on Tuesday was served on the roof garden of the hotel. Short addresses followed a satisfying meal.

E. B. MURPHY, sec'y New York State Hay & Grain Dealers Ass'n, expressed the sympathy of his organization with the problems of the producers. Unless the farmers get fair prices they cannot pay fair prices for feeds and grains. The proposed state tax on trucks, if passed, will greatly increase transportation costs so the producers will have to pay higher prices for their purchases, he said.

DR. ARTHUR W. CLARK, Geneva Experimental Station, reviewed feed experimental work and feed laws and regulations.

Officers of the ass'n concluded the luncheon session with a call for voluntary funds for carrying on a program to "Get the Government out of Private Business," one of the key notes of the convention. The results were gratifying.

TUESDAY AFTERNOON SESSION

PROF. F. B. MORRISON, Ithaca, N. Y., was the first speaker on the Feed and Feeding Clinic program opening Tuesday afternoon. He discussed interesting discoveries in livestock feeding, which will be published later.

C. S. SIEVERT, Chicago, talked on quality in proteins. His address is published elsewhere in this number.

H. H. TRAPP, Buffalo, discussed the increase in the value of mill feeds for feeding purposes, attributing the increase to the better mechanical handling methods that have come to the fore in recent years, and the improvements in cleaning. His address will be published in an early issue.

BANQUET AND ENTERTAINMENT

A banquet was served in the hotel at 6:45 p. m. Tuesday. Following a delightful dinner the delegates listened to the entertaining remarks of Judge Roscoe C. Harper, Sherburne, N. Y., and profited from the illustrated lecture tour of national parks and canyons of Utah and Arizona delivered by J. T. Caulfield.

WEDNESDAY MORNING SESSION

FRED H. SEXAUER, pres. of the Dairymen's League, was the first speaker at the third session. He told about his organization and its efforts to increase the farm purchasing power.

JUDGE HARPER gave as one reason for the present agricultural situation that the farmer has forgotten how to farm. While the farmer is entitled to luxuries just the same as any other class, he cannot buy them under present conditions. The old time farmer was a financial success partly because he did his own work.

In the resolutions adopted opposition was expressed to exploiting of products of certain organizations by federal, state and county employees to the detriment of legitimate private business. Legislation to correct this evil and confine such employees to their educational pursuits was advocated.

Oppose Commercial Pursuits of Public Officials

WHEREAS certain evidence has been presented to this body that divers persons in the employ of the federal, state and county governments, and divers public and quasi-public officials, in the past and at present are using their official titles and positions to advocate, foster, exploit and advertise the goods and products of certain corporations

and co-operative ass'ns, to the exclusion of other legitimate business and businesses conducted by individuals, firms, and corporations, and

WHEREAS this conduct is prejudicial to the business of other individuals, firms, corporations and organizations, and this body seeking to prohibit such conduct on the part of the aforesaid individuals, be it

RESOLVED, that legislation be enacted in all branches of government, forbidding and restraining any public or quasi-public official or any employee of the federal, state or county governments from advocating, fostering, exploiting or in any manner advertising or recommending to any person or persons, the products of any certain individual, firm, corporation or co-operative ass'n which is conducting any business in competition with other legitimate concerns, and for a violation of any such law or laws, a fine and/or imprisonment and/or removal from such position be imposed, and, be it further

RESOLVED, that legislation be enacted prohibiting any individual, firm, corporation or co-operative ass'n from using the name of any public official in the advertising of their or its goods or products.

Adjourned sine die.

Proposed Power Rates in Indiana

Compiled from the answers to 300 questionnaires the Power Rate Com'ite of the Indiana Grain Dealers Ass'n has formulated a uniform schedule of rates for the consideration of the Public Service Co. of Indiana, to apply on all local grinding and mixing units throughout the state. The schedule submitted is:

First 100 kw.h. per month.....	\$0.05
Second 200 kw.h. "	.04
Next 300 kw.h. "	.035
Next 400 kw.h. "	.03
Next 500 kw.h. "	.0275
Next 500 kw.h. "	.0250
Next 1,000 kw.h. "	.02
Next 2,000 kw.h. "	.0175

A minimum horse power charge of 50c per h.p. connected load, to and including 50 h.p. All over that on the basis of 25c per h.p.

With the minimum of 25 h.p. connected load, the light bills to be figured in upon the existing power rate. A discount of 5% to be allowed on bills paid within ten days from the date bill is due, except minimum rate bills.

Sec'y Fred K. Sale, of the Ass'n, advises grain and feed dealers of Indiana that:

It is the duty and necessity of each power user to check up frequently with his own power company to see what rates are available and will be the cheapest. An "optional" power rate can be filed by the Utility Co. with the Public Service Commission without notifying you or giving you the benefit of such reduced rate, unless you signify your desire to take advantage of this optional rate. Ignorance of filed power rate schedules excuses no one.

A Joint Meeting of the Ass'n of Cereal Chemists' Kansas City, Nebraska and Pioneer Sections will be held at Manhattan, Kan., Mar. 12, one of the addresses being by Dr. Edwin C. Miller on "The Formation of the Wheat Grain." The time for the annual meeting to be held at Detroit, Mich., has not been set.

Exports of Feeds

Exports of feeds of domestic origin during January, 1932, compared with January, 1931, and for the 7 months ended with January, 1932, compared with the same period a year ago, are reported by the Buro of Foreign & Domestic Commerce (000 omitted), in short tons, as follows:

	January 1932	1931	1932	1931
Hay	627	1,387	2,062	3,048
Cottonseed cake	11,427	10,526	128,530	21,658
Linseed cake	9,657	5,280	146,103	64,677
Other oil cake	1,863	2,924	22,795	7,517
Cottonseed meal	11,760	558	44,202	5,207
Linseed meal	625	147	5,328	3,673
Other oil meal	150	403	809	1,573
Oyster shell	6,112	6,313	30,604	34,539
Fishmeal	47	320	729	...
Alfalfa meal	53	129	1,327	...
Mixed dairy feeds	100	73	1,252	935
Mixed poultry feeds	217	503	2,949	3,329
Other mixed feeds	332	164	4,353	2,711
All other feeds	5,307	1,120	33,833	8,931

Laboratory Testing Protects Efficiency of Formulas

An interesting news item published a few days ago recalls that with the development of the feed business has come the growth of laboratories for analyzing and measuring protein, fat, fibre, nitrogen-free-extract, and other component contents of formulas. Not only have the laboratories become important factors by helping maintain formula standards, they have become of equal importance to the manufacturers of concentrate ingredients used in making feeds, and in determining what chemicals make up other lines, such as fertilizers, which elevators handle. The item reads:

Chicago, Ill.—Runyon Testing Laboratories have augmented their force of chemists with the addition of C. F. Kumli, who spent 6 years with Deavitt Laboratories as chief chemist. The service of Runyon Laboratories has been broadened to include analysis of fertilizer, fats and oils, as well as feeds, grain, and general analytical work and research for which the institution has built up an enviable reputation.

Certainly without the chemist development of the balanced rations that have turned cows into milk factories, hens into egg-makers, swine into quick builders of bacon, hams and pork, would have been impossible. The foundation of the feed formula is understanding the chemical food requirements of the animal and its product, finding these in usable form and putting them together so they will be readily broken down and assimilated thru the digestive tract.

Right here is the beginning in making feeds. It is a popular human failing of mixers to accept ingredients at face value, mix entirely according to weight and trust that the animal which consumes the feed will give good results; or that state feed inspectors will overlook picking up a sample and testing it to make sure the sample lives up to the declaration on the label.

One of the largest manufacturers of feed in the country never accepts a carload of any one ingredient such as linseed meal, cottonseed meal, meat scrap, without first having it analyzed. This company, thruout a long and successful record, has seldom had difficulties with feed officials.

Another, a large purchaser of fish by-products, never accepts a carload of this variable ingredient without first getting a private test of the protein content.

An Illinois producer of animal-by-products is building an enviable reputation thru selling consistently uniform products.

Being sure of the analysis of an ingredient by sending a sample to a laboratory before mixing it into a formula insures against letting the contents of the feed fall below the guarantee, causing court hearings, fines, and costly remixing to correct the mistake. At the same time such tests of ingredients enable the mixer to work close to the guarantee, avoiding use of greater quantities of high-priced protein and mineral ingredients than are necessary.

The farmer may now expect some splendid news from Washington. Our statesmen are thinking up new ways for him to get into debt.—*The New Yorker*.

Air and water play an important part in the production of dairy cows. As in the case of feed, consumption is dependent on production, low producers using less than high producers. A 1,000 lb. cow will inhale approximately 2,800 cubic feet of air per hour; she will drink nearly three times as much water as the volume of milk she produces under favorable conditions. Milk is 87% water. Knowledge of such factors in milk production helps the grain and feed man recommend favorable conditions under which his feeds will work to the best advantage.

Successful Convention of Washington Feed Dealers

Over 150 members of the Pacific Northwest feed trade held the 4th annual convention of the Washington Feed Dealers Ass'n in the Tacoma Hotel, Tacoma, Saturday, Feb. 20.

A luncheon started the proceedings, at which the dealers listened to a rousing welcome and responded in kind.

GEO. A. GUE, Everett, talked on the dairy situation in the Northwest, drawing on a quarter-century of experience, advocating culling low producers.

LOWDEN JONES, pres. of the Pacific Northwest Grain Dealers Ass'n, talked on "Business and the Government—What Next," calling attention to the growth of bureaucracies, and their encroachment in lines of private endeavor.

ARTHUR KULIN, Washington State College, discussed "Success Factors in the Poultry Industry," calling attention to the importance of feeding, lowering mortality, eliminating disease, and other factors that influence profits from poultry.

HUGH CLARK, past-pres., told about the organization of fertilizer manufacturers, and the promotion of fertilizer sales. Efforts by manufacturers to help retail dealers improve sales were explained by Frank Mechner.

GEO. DONNELLY, chairman of the Ballott Audit Com'ite, reported the results of the election for district governors. These included Harry Folley for the Bellingham district, Charles England for the peninsula district, George Thompson for the Chehalis district and Frank Burlingham for the southern district.

At a meeting of the new board of governors, following the business session, election of officers replaced last year's officials. R. M. Clagett, Snohomish, pres.; Geo. R. Thompson, Chehalis, vice-pres.; R. J. Stretch, Monroe, sec'y-treas.; Floyd Oles, manager.

A banquet was held in the evening. Many of the dealers stayed over Sunday for a golf tournament.

A Dairy Ration Utilizes Malt Sprouts

BY S. M. HEWSON

Tender, palatable, high in protein and digestibility, malt sprouts have found a prominent place in the feeding programs of many dairy men. These dried rootlets from malting barley contain more than twice as much protein on a percentage basis as the original barley, in a form especially adapted to the needs of dairy cattle when fed in the right combinations. Further they are excellent carriers for molasses, increasing the bulk of the ration to satisfy digestive requirements.

"Feeds and Feeding," the accepted authority, credits the average run of barley with 11.5% protein, 2.1% fat, 4.6% fibre and 69.8% nitrogen-free-extract. The same authority gives No. 1 malt sprouts 26.4% protein, 1.5% fat, 12.6% fibre and 50.4% nitrogen-free-extract.

A 16% protein dairy ration that has found favor in feed mixing and dairy feeding circles is as follows:

Ingredients	With Molasses	Without Molasses
No. 1 malt sprouts.....	300 lbs.	200 lbs.
Corn gluten feed.....	200 "	300 "
Brewers' dried grains.....	200 "	200 "
Cotton seed meal 43%.....	50 "	50 "
O. P. linseed oil meal.....	50 "	50 "
Wheat bran.....	200 "	200 "
Corn meal.....	540 "	540 "
Ground oats.....	300 "	400 "
Molasses.....	100 "	...
Steamed bone meal.....	20 "	20 "
Lime.....	20 "	20 "
Salt.....	20 "	20 "

Molasses Being Made Into Fertilizer

Overproduction and loss of a market on molasses in Hawaii is being answered in a practical way by experiments with turning it into fertilizer. Hawaiian sugar manufacturers produce 250,000 tons of molasses annually. Finding themselves unable to dispose of more than 10% of it as molasses they sought new outlets.

Extensive experiments were consequently undertaken by the Hawaiian Sugar Planters Ass'n, analysis showing molasses to contain about 4.5% potash as K₂O, a little less than 1% nitrogen, and a high percentage of organic humates.

Subjected to a charring process with sulphuric acid and mixed with a portion of basic crude fertilizers and mill ash, the molasses becomes a dry, granular product, easily handled. Soil pot tests have given highly satisfactory results, the undefined humic constituents of molasses apparently proving a valuable plant food, showing results not obtained with inorganic commercial fertilizers on the same basis.

General Analysis and Research Specialists in Feeds, Grain, Fertilizers, Fats & Oils
Runyon Testing Laboratories
1106 Board of Trade Chicago, Ill.

A perfect blend of Iron and Copper
IRON-COP
Mineral Blend
Your feeds need copper with the iron
TAMMS SILICA CO.
Mills: Tamms, Ill. Dept. F, 228 No. LaSalle St. CHICAGO

Donahue - Stratton Co.
MILWAUKEE
GRAIN & FEED

Elevator Capacity at Milwaukee 5,500,000 bushels

STANDARD COMMISSION CO.
BROKERS

Grain, Mill Feed, Mixed Feed Ingredients
EXCHANGE BUILDING **MEMPHIS**

Practical Poultry Farming

by L. M. Hurd
extension instructor in poultry husbandry, New York State College of Agriculture at Cornell University, is an up to date treatise on the raising of poultry. The poultryman who keeps hens as a main enterprise, the farmer whose flock is incidental to other farm operations, and the feed dealer who wants to talk knowingly about poultry raising will all find the book useful and profitable to read. Printed in large type, and with many illustrations, its 400 pages are full of practical information.

Price \$3.50, f. o. b. Chicago

Grain & Feed Journals
CONSOLIDATED
332 So. La Salle St., Chicago, Ill.

Major Considerations in Formulating Commercial Feeds

By C. S. SIEVERT, CHICAGO, before Eastern Federation of Feed Merchants

Profit is the purpose of doing business. Competition between commercial feeds makes it necessary for the manufacturer, the grinder and mixer to be sure that his overhead expenses are as low as possible. Overhead expenses are made up essentially of manufacturing expense and sales expense. Administrative expenses are usually very low. To bring down the manufacturing cost efficient machinery and good mechanical lay-out are necessary. Material handling equipment and grinding and mixing equipment should be adequate to take care of the job, but should not be so elaborate that the charges for maintaining the investment will become a major item in manufacturing cost.

Selling cost is a real item and sometimes very expensive. The cost of selling the first order of feed to a customer is high. Many times this first selling cost is so great that there is a considerable loss in the entire transaction but repeat sales at a lower selling cost will make up this difference and soon show a profit. The way to cut down sales cost is to make the feed easy to sell.

CHARACTERISTICS OF FEEDS: Certain necessary physical attributes of feeds must be considered by the manufacturer. First is appearance. This depends on color, the way in which the ingredients are ground, the bulk or weight per bu. of the feed, the way it feels when handled and sometimes the way it mixes with water or other liquids. This question is of importance principally in selling the first time.

Local conditions and ideas influence the color and bulk of feed. A large manufacturer who ships into several sections of the country may have to make the appearance of his feed such that a majority of the people will be satisfied. The smaller manufacturer who serves a comparatively restricted district can make his feeds closely fit the ideas of his customers.

PLATABILITY: This point covers the taste and smell. Ordinarily we would say it applies to the animals that are to eat the feed, but actually the taste and smell of the feed to the human being must be considered, because the owner of the animal will undoubtedly smell of the material and probably taste it before buying. After that the animal gets a chance. If the animal eats it readily the feed has an opportunity to demonstrate its value. There is decided difference between eating the feed with relish and eating the feed as a last resort to keep from starving. An old experiment is on record wherein dogs had been altered so that food consumed did not reach the stomach but passed out through a side opening. It was found that those foods which the dog liked would cause a greater flow of saliva in his mouth and a greater flow of gastric juices in the stomach. Feeds not keenly relished did not bring this flow of saliva and digestive juices. Consequently feeds that are relished stand the best chance of digestion and ultimate nourishment.

PERFORMANCE: The third point is efficient performance of the feed. If it is used to produce a certain product it must produce at a low cost. The basis of repeat orders is efficient performance, consequently the profit making power of the feed depends thereon.

PROTEINS: Ten or fifteen years ago the absolute necessity of proteins in feeds was recognized. However, it was thought that a pound of protein from one source was just as good as a pound of protein from another. Feeders did not recognize that the term "protein" refers to a class of compounds com-

prising a large number of individual substances, no two of which are exactly alike.

In 1923, Dr. D. B. Jones of the U. S. Bureau of Chemistry, talked on the subject of "Quality of Protein" to the Ass'n of Feed Control Officials. Gradually the feed manufacturers learned that proteins were constructed of a number of amino acids, often referred to as "building stones." The idea of various qualities of proteins was associated with certain of the amino acids and the presence or absence thereof.

It is now generally recognized that all proteins are constructed from a group of approximately twenty amino acids. Besides these are some five or six amino acids that are known chemically and that have been suspected of being used in protein, but have not become definitely proven constituents. Certain of the amino acids are known as essential—without them animal growth is impossible. Such are lysine, cystine, tryptophane, and histidine. Arginine is sometimes considered as an alternate for histidine. Tyrosine is also considered essential by some investigators. Other amino acids are usually considered interchangeable which means that such amino acids may be entirely absent from the mixture in the protein because the animal body is able to synthesize them from other amino acids.

Quite recently Prof. Wm. D. Rose at the University of Illinois, fed mixtures of purified amino acids, but found that it was necessary to add a substance which he extracted from casein before normal growth would take place. He also found that when this extracted substance, which is not an amino acid, was added to the mixture of purified amino acids, the animals ate it, and ate it in sufficient quantities to produce normal growth. It is possible that out of these experiments a new hitherto unrecognized factor in protein nutrition will come to light. The substance has been found in various materials, but its best source was from the casein of milk.

Experience has taught that usually a mixture of two proteins will do better work than one, and many times a mixture of several is best. Sometimes we have heard that a mixture of proteins increases digestibility. Technically, this is incorrect. All the protein which is digested is not necessarily used. Digestion means that the protein has been broken down into the constituent amino acids, and that these have passed into the blood stream. This does not necessarily mean that the blood delivers all this protein into the various parts of the body where it will be rebuilt into body protein. I believe I am correct in stating that no one has found a protein of such a composition that all of the digested part is also used in the production of body protein. The amino acid content may not be just right for that particular animal or class of animals, or for the part of the body where the protein is to be used. Consequently, the amino acids that are needed are used and the rest of them discarded. These discarded amino acids may pass out in the urine, or they may lose their nitrogen content and then portions of the carbon, hydrogen and oxygen could be used in place of carbohydrates or fats.

MUTUAL SUPPLEMENTARY EFFECT: The fact that certain protein combinations give better results than you would expect from the average result of the constituent protein has brought about a term known as "mutual supplementary effect." An

excellent example is given in Henry and Morrison's "Feeds and Feeding" in the fifth chapter on growth and fattening under the heading of "Protein Requirements for Growth." Dr. Morrison refers to feeding experiments wherein pigs were fed proteins from a single source and from two or more sources. The experimental data show that when fed corn, wheat, or oats the pigs retained only from 23 to 28% of the protein for body growth. With skim milk 66% of the protein was stored. With milk casein 51% was retained. A mixture of $\frac{1}{3}$ each of corn, wheat, oats gave results only a little better than any one of the cereals alone. With linseed oil meal only 17% of the protein was stored, but when a mixture was made with $\frac{3}{4}$ corn and $\frac{1}{4}$ linseed oil meal then 37% of the total protein was stored which is considerably better than either feed alone. This indicates supplementary action. With corn and tankage or barley and tankage about 40% of the protein was stored and with corn and alfalfa hay only 32%. Skim milk was the most efficient supplement of the cereals because 62% of the protein resulting from a mixture of corn and skim milk was retained in the body.

Prof. H. H. Mitchell of Illinois, and quite a few other protein investigators, are using the term "biological value" in the same way in which Thomas used it back in 1909. Biological value means the percentage of digested protein that is actually used in producing growth. These biological values can only be arrived at by certain experimental means. Using this system of evaluation we find that the proteins from milk have a biological value of approximately 85, wheat 67, oats 65, corn 60, wheat bran 57, standard middlings 61, tankage 42, soybeans 64, cottonseed meal 66.

Using these biological values an example of mutual supplementary effect of corn and milk proteins is given in some work by Mitchell. Where the experimental animals were fed a mixture of corn and milk proteins 70% of the total proteins was derived from corn and 30% from milk. On these experimental animals the biological value for that particular sample of corn was 61.3 and for that milk was 84.7. Averaging these two values according to the percentages in which they were used we would expect a biological value of 67.2. The actual biological value of the combination as determined by feeding was 75.7. The difference represents mutual supplementary effect. This can be translated into terms of shelled corn or corn meal and dry skim milk. The amounts would be approximately 10 lbs. of shelled corn or corn meal to 1 lb. of dry skim milk. This means that feeding a pound of dry skim milk with each 10 lbs. of corn used in the feed will supplement the grain proteins.

Other examples of supplementary effect are as follows: corn and tankage show a small supplementary effect. Combinations of corn, alfalfa, and cottonseed meal show no effect, except cottonseed meal and alfalfa where the effect is slight. There is no supplementary effect between corn and soybean

[Concluded on page 255.]

Feed Future Prices

The following table shows the closing bid price each week per ton of standard bran, gray shorts and standard middlings for May delivery:

	Feb. 6	Feb. 13	Feb. 20	Feb. 27	Mar. 5
St. Louis—					
Bran	\$ 9.50	\$ 10.20	\$ 10.20	\$ 16.40	\$ 10.75
Shorts	10.50	11.65	11.45	11.30	11.65
Midds	10.45	10.95	11.15	11.00	11.20
Kansas City—					
Bran	7.90	8.55	8.00	8.50	8.45
Shorts	9.50	9.75	9.75	9.75	9.55

Fire Hazard of Portable Mills

By L. P. DENDEL, *State Ass'n of Mutual Insurance Companies of Michigan*

The portable feed mill constitutes a serious fire hazard to farm property. This machine consists of a heavy duty feed grinder driven by a 50-60 H.P. high speed gasoline engine, both mounted on a truck so the grinder may be moved from farm to farm.

In established feed mills, the grinder and gasoline engine are both considered hazardous. Most of the engines are located in fire resistive rooms, separate from the feed mill and precautions are taken to eliminate the back-fire hazard and the hazard from the exhaust pipe. Gravity feed fuel supply is not permitted. Fuel must be kept in a storage tank out of doors, buried underground. Feed mills must be protected from tramp iron with electro-magnetic or pneumatic separators, where a spark might cause a serious explosion or the iron itself become red-hot and pass into the feed spout or bag to start a smouldering fire which may not manifest itself for a number of hours. None of these hazards are guarded against in the present day portable feed mills, and from the very nature of the combination machine, some cannot be eliminated.

In four short months we have received information regarding three fires from portable mills, and there may have been others not reported. One of these caused a total loss to the farmer's barn of nearly \$3,000.

Early in December, a fire occurred in the portable feed mill on the Bishop farm, 6½ miles southwest of Mulliken. No damage was done to farm property, as the mill was operating in the yard. About the middle of December, fire occurred in a portable feed mill owned by Francis Moored at Burnips Corners, on a farm near that village. No damage was done to farm property as the mill was operating in the yard, but the operator was severely burned in attempting to extinguish the fire. Had the weather been inclement both of these mills would have been operating inside of the farmer's barn or granary, and undoubtedly another total loss would have occurred in both cases. Fires originating from such machines spread very rapidly.

H. K. Fisk, sec'y, State Mutual Rodded Fire Insurance Co., of Michigan, describes another fire:

You may be interested to know our Company has suffered loss of barn and contents of \$2,911.63 which was caused by portable feed grinder. This fire occurred on the McNeil farm located about 5 miles east of Flint. It is claimed that the truck upon which the feed mill is built stood with the front wheels on the barn floor and the rest of the machine outside. After the grinding was completed and power shut off, the engine immediately back-fired very severely and the strong wind blew the fire into the haymow, where it could not be extinguished.

Such conditions have caused Chas. V. Lane, Ass't State Fire Marshall, to send a notice to assureds in the state, saying:

The State Fire Marshal Department desires to call your attention to a hazardous condition, brought to our attention by the use of portable feed mills which are now operating throughout the State of Michigan.

We have had a number of fires reported from this cause. We believe an exceptional hazard exists, especially where such machinery is permitted to operate inside a building. This is a violation of the State Regulation. It is also a violation to allow more than 5 gallons of gasoline inside of a building.

These machines are entirely too dangerous to be operated in or about farm buildings. If there was any prospect of this business becoming permanent, your ass'n might do something toward working with manufacturers to eliminate the hazards. This, however, would be difficult as many of the machines are home-made, the owner purchasing the separate units and assembling

them himself. There is no reason why the farm mutuals of Michigan should be holding the bag, paying for a lot of unnecessary fire losses.

Word has reached me from about 10 companies that their policies definitely prohibit the use of gasoline engines on farm premises without a permit, or that they have notified their policyholders their policies would be void while such a mill was operating on the premises and for a period covering 24 hours afterwards. The insurance companies are playing safe.

[Since Mr. Dendel's article was prepared word has been received of another Michigan fire caused by a portable grinder. Alfalfa hay was being ground in the \$4,000 barn of Dan Judge, 10 miles southwest of Mt. Pleasant. A hired man noticed the fire on a pile of empty bags a few feet from where the grinder was operating, and discovered a piece of red-hot iron about the size of a 20-penny nail. As this was on the throat side of the hammer mill where the stock is fed in, it was evident that this piece of metal was thrown back out of the throat of the grinder by the force of the hammers, a common occurrence in hammer mills unprotected by magnetic or pneumatic separators. Mr. Judge was considered extremely lucky that the fire developed almost immediately, instead of smouldering for several hours before breaking out.—Ed.]

Major Considerations in Formulating Commercial Feeds

[Continued from page 254]

protein. There is an appreciable effect between corn and peanut proteins, also between corn and rice bran.

It is not enough for the grinder and mixer to make mixtures of grains and feeding materials that have good quality proteins but modern feeds must have these protein materials so that they will work together, so as to take advantage of the mutual supplementary effect.

In considering the milk product to use in mixing feeds, particular importance should be placed upon the protein content, and the fact that they represent the entire protein of milk, not just a part of it. Dry skim milk, for example, contains from 34 to 37% complete milk proteins. This means it contains all the casein, all the milk albumin and all the lactoglobulin present in whole milk. If you will recall the figures of the experimental work with pigs reported in "Feeds and Feeding," milk proteins showed that 66% were retained in the body of the pig for growth whereas with casein alone 51% was retained. This was compared with corn, oats, and wheat in figures of 23 to 28% being retained for growth. It is important that all the milk proteins be present to get the greatest supplementary effect.

Mutual supplementary effect is of primary importance today. Much is still to be learned about it but enough is known to show us how to go about combining the protein feeds and not make serious mistakes.

Generally speaking feeds made up of the ground grains and the grain products will not be as efficient as if some of the oil meals are added. This latter class in turn will not be as efficient as if some animal proteins are added. Incidentally, I might mention that marine products, such as fish meals, seem to have a slightly greater value than most of the meat products so far as individual value and mutual supplementary effect of proteins are concerned. On top of the list is milk protein which has the greatest individual value and greatest supplementary effect.

In order to make feed more efficient and cut down sales resistance on repeat orders we should do everything possible to make the feed as efficient and valuable as possible. Combining of the proteins so as to take advantage of the mutual supplementary effect will go a long way toward making your feed efficient.

Active Cottonseed Meal Market

By J. M. TRENHOLM

Memphis, Tenn., Mar. 5.—Operations in the cottonseed meal market have been very active during the week. Just prior to Mar. 1 the meal market was weak and new low prices were recorded on the recent decline. With the advent of March a strong tone developed due largely to the scarcity of deliveries on March contracts. This forced the price of March up \$1 a ton bringing a corresponding advance in the other options. The advance came in the face of a slow demand for actual meal, but was assisted by strong markets in grain and other products, and culminated today when \$14 was again paid for September meal.

The advance in prices also brought better demand in the spot department where there was quite a considerable amount of buying by dealers. The consuming demand has not been active as mixers have been inclined to resell purchases. A sharp drop in temperature over the country has been encouraging to buyers in anticipation of better feeding demand. A large surplus of meal causes the trade to be cautious about following advances.

R. T. FRIEND

Lafayette Indiana

Unlimited supplies

Pure Dried Buttermilk

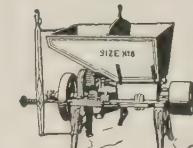
Pure Dried Skimmilk

Carlots and L. C. L.

Prices and Samples on request.

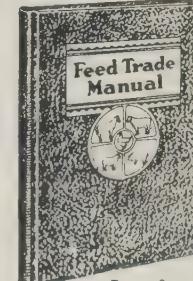
BOWSHER Crush Grind Feed Mills Mix

Rapidly crush ear corn (with or without husk) and grind all the small grains; either separately or mixed—mixed as they are being ground—not before or after. This saves time and labor.

"COMBINATION" MILLS

Use the famous Cone-Shape burrs. Light Draft. Large Capacity. Solidly Built. Long Life. Special sizes for the milling trade. Sacking or Wagon Box Elevator. Circular on request.

THE N. P. BOWSHER CO.
SOUTH BEND INDIANA

A Complete Manual of up-to-date Feed Formulas

Indispensable to the man who mixes and grinds feed. A Practical How To Do It Book containing Formulas for all kinds of feed for any section of the country.

Leather Bound \$5.00 } Plus

Cloth Bound - \$2.00 } Post-

age

for sale by

Grain & Feed Journals

Consolidated

332 So. La Salle St., Chicago

Poultry Feeds and Feeding

Room for Breeding Pen Rations?

Why not a ration for breeding pens? Thousands of eggs put into incubators annually are a dead loss because they don't hatch. At the same time they take up space, time, effort that should be devoted to producing live, active, salable chicks.

Several factors enter into producing hatchable eggs from breeding pens. Vigorous birds, plenty of air, water and exercise.

Of equal importance is feed. Minerals and proteins must be present in the proper amounts and in balance with the rest of the feed. Of greater importance is the vitamins. Plenty of vitamin A thru the use of green feeds, dry, or dehydrated alfalfa, yellow corn, enough so the egg yolks will be too dark to classify as "extras." Biologically tested fish oils containing vitamin D should be present to help the bird make full use of the minerals. Better safe than sorry. At least 5% powdered milk belongs in the breeding birds' diet. It has a beneficial effect on hatchability.

Intensive poultry raising sections should be a market for breeding pen rations that will promote hatchability.

Japan's Fish Meal Industry

A guild is being formed under the auspices of the Japanese government for promoting the fish meal industry, and establishing standards for export fish meal, according to reports reaching H. B. Titus, ass't trade commissioner in Tokyo.

Annual production of fish meal in Japan is estimated at approximately 25,000 tons. Principal export markets are United States, Germany and England. Potential production is extremely large, in some cases being estimated at 250,000 tons annually.

Japanese methods of producing fish meal are ancient, and are the reason for water content in the Japanese product, which has interfered with its export. German, American and Swedish firms are now offering machinery to improve the quality of the product, so a water content of 10% on further exports is believed to be the maximum which will be permitted.

Molasses in Poultry Feeds Reduces Mortality of Chicks

Molasses in poultry feeds has been found to reduce the mortality of hens and increase the fertility of eggs, according to California experiments. Common experience has indicated good results if not more than 5% molasses, containing approximately 50% free, digestible sugar, is included in the total ration.

Two pens of hens were fed a modified Ohio ration with cracked grains mixed and fed with the mash in an 11-month test at the Southern California Farm Buro Egg Laying Contest at Pomona. One pen was given 3.6% molasses with the ration; the check pen was given no molasses.

In the 11 months the birds fed molasses averaged 123.38 eggs each, compared with 120.95 eggs in the check pen. While this variation may be counted experimental error, more interesting information is revealed by 6.25% mortality among molasses fed hens, compared with 12.50% in the check pen; 76.22% fertility in eggs from the molasses-fed hens, compared with 70.21% in the check; no chick mortality in molasses fed stock, compared with 18.18% in the no molasses group.

Ride Up With the Hens

Basing mature judgment on the present range of egg and poultry products prices, the editor of *Poultry Item* calls attention to the existing shortage of about 50,000,000 laying hens. This is causing a shortage in production of eggs totaling about 2,000,000 dozen daily.

In storage the 1st of the year were 116,759,000 lbs. of dressed poultry, compared with 104,913,000 lbs. a year ago, and an average of 123,462,000 lbs. for the past five years. Total storage holdings of eggs Jan. 1 were 1,475,000 cases, compared with 1,894,000 cases a year ago. No seriously bearish price factors there, as is reflected by the small decline in price taken by poultry products compared with other agricultural commodities.

Surpluses of eggs are in cold storage, but the surpluses are dwindling rapidly in the face of price sacrifices. With conditions clean in the poultry industry a definite upward trend may soon be expected which will broaden the already existing margin of profit for the poultry men and the farmers who keep laying flocks.

Broadening of the margin will bring business to the feed dealers, grinders and mixers in increasing volume. Every man logically suited to serve this trade should place himself in position to ride up with the tide and reap prosperity from business with those who have hens.

Vitamin D bearing fish oils build stronger shells, reduce the number of soft shelled eggs and eggs broken in nests, prevents egg-eating and makes eggs hatch better. In some cases it even makes larger eggs and more of them. Chickens demand sunshine, or a suitable substitute.

New Feed Trade Marks

Fasterfat, Ltd., Halifax, Nova Scotia, Can., No. 315,835 for fish meal, a stock and poultry feed, being a fanciful lettering of the word "Fasterfat", to leave an impression of fast movement in the direction of reading.

Increase Your Mash Feeds Business with ANIMAL-POULTRY YEAST FOAM



Millers and Feed Manufacturers Cashing In Big on the Large and Increasing Demand for Yeast Feeds

Faster growth, increased fertility and much greater resistance to disease have been proved so often that yeast in poultry and stock feeds is now considered a necessity by all wise breeders. Yeast is the richest known source of Vitamin B—the growth vitamin—and is rich also in Vitamin E, which produces fertility and stimulates reproduction. Yeast-fed stock and birds have more red corpuscles, fewer bacteria in the digestive tract, and much better digestion.

Animal-Poultry Yeast Foam in your mash feeds will increase your feed sales and profits, give better results to your customers, and bring them back for more. A postcard inquiry will bring the complete story of yeast and yeast feeding by return mail. Write today.

NORTHWESTERN YEAST CO.
Department X, 1750 North Ashland Avenue, CHICAGO, ILLINOIS

Poultry Feeding Experiments

Rice products are the base of a new turkey fattening formula developed by the Texas Agricultural College and the Houston Chamber of Commerce. A half-ton mix contains 390 lbs. brewers' rice, 200 lbs. rice bran, 150 lbs. rice polish, 100 lbs. wheat shorts, 50 lbs. dried buttermilk, 50 lbs. cottonseed meal, 50 lbs. meat and bone scraps, 10 lbs. salt. The low price of rice led to its development and it is reported to have proved satisfactory.

SUCCESS

BRAND

Selected Poultry Scraps

50% Protein

Digester Tankage

60% Protein

Most profitable high protein supplements for feeding hogs and poultry. Write or phone our nearest office at our expense

Success Mills, Inc.

CHICAGO, ILL.

Kansas City, Mo.

E. St. Louis, Ill.

Poultry

Feeds & Feeding

By Lamon & Lee

A book of 247 pages designed to meet the needs of all who are interested in feeds for poultry. Grains, rations and methods used in every section of the U. S. are taken up and discussed to make this book of value in all sections.

In three parts: Part I is devoted to the principles of feeding, explains which elements have been found essential in feeding poultry and tells why certain combinations are made. Every grain or feed-stuff used for poultry is discussed in Part II. Rations for every class of poultry keepers are included in Part III.

An invaluable book which should be in the reference library of every grinder and mixer of feeds for poultry.

Price \$1.75 plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

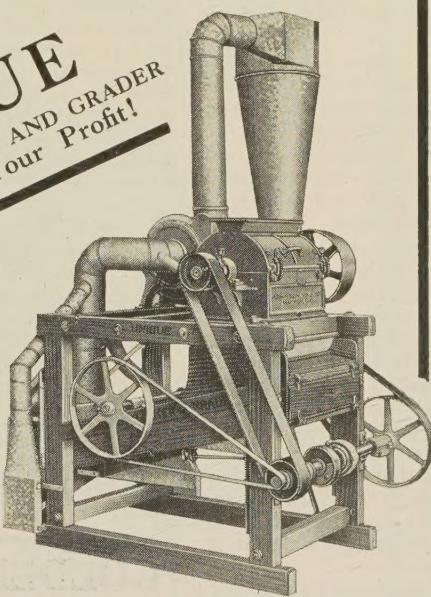
Chicago, Ill.

You Just
Bet This
UNIQUE
COMBINED CUTTER AND GRADER
Will Increase Your Profit!

It CUTS—and
GRADES—and
CLEANS—all
in one operation

This is a complete outfit for producing clean, uniform cracked corn. It is neat and compact — everything is placed in one substantial frame. The machine comes to your mill ready to be connected to power. No costly changes to your building—no expensive millwright charges. And the machine operates efficiently at all times with the least possible maintenance. It is indeed a profit producer.

*Built in Two Sizes—For 1500 and 2500 pounds
of cracked corn per hour. Ask for Bulletin 35-D*



ROBINSON MFG. CO.

42 ROBINSON BLDG.,
CHICAGO OFFICE - - 222 W. ADAMS ST.

MUNCY, PENNA.

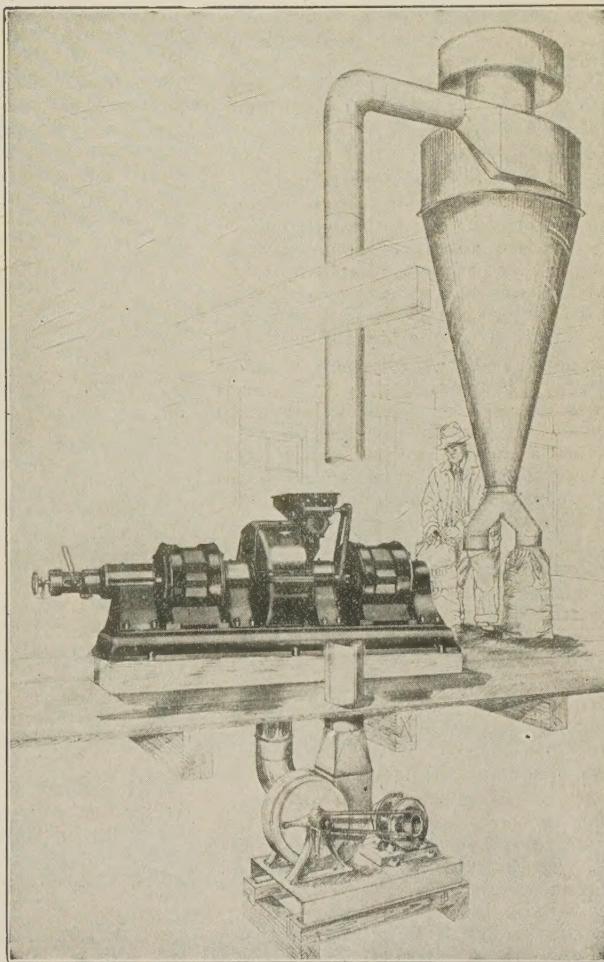
Elevators Are Often Sold for \$1.00

thru the "Elevators for Sale" columns of the Grain & Feed Journals, Consolidated, the Grain Trade's long accepted medium for Wanted—For Sale advertisements, try it.



The Monarch Attrition Mill with Air Collector

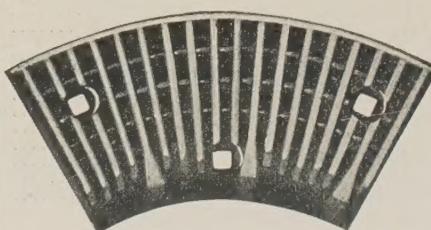
For More Profitable Feed Grinding



It is obvious that a mill designed to grind small grains is going to take less power than one built to grind roughage. The quick cutting action of grinding discs will pulverize small grains with 15 to 25 percent less power than a mill that must hammer the product through a screen. Then, too, the perfectly balanced discs of the attrition mill operate without vibration. This of course, means longer life, lower upkeep and less attention.

Equipped with the Monarch Products Collector and our new Style V Plates we guarantee the

Monarch to
grind more per
horsepower
than any other
feed grinder.
Check up now
and see how
much a Mon-
arch will save
you.



SPROUT-WALDRON
& Co., Inc., 1202 Sherman St., Muncy, Pa.

Chicago Office—9 So. Clinton St.
Buffalo Office—725 Genesee Bldg.

America's Leading Line of Feed Mill Machinery

GRAIN & FEED JOURNALS Consolidated

Fattening Poultry with Corn Oil Cake Meal

By S. M. HEWSON

Two methods are ordinarily used to fatten poultry. Pen fattening is practiced when birds of any sort are to be sold alive and shipped. Crate fattening is practiced to produce poultry meat of the highest quality for special trade.

The extra quality of the flesh produced by these methods, is due to mash feeds used under conditions of restricted exercise, to soften the flesh, keep it tender and juicy, and improve the quality and flavor.

When a large number of birds are to be fattened in the crates, standard feeding batteries are used to conserve floor space. When a small number of birds are to be fattened, a home made crate made from a large box may be used, by providing a slatted bottom and front, for which ordinary plasterer's laths may be used, with a feeding trough attached to the front on the outside.

To fatten poultry successfully, select good vigorous stock. Extremely thin birds are usually either diseased or, so badly infested with parasites, that their feed is wasted. Such birds are a menace to the rest of the flock and should be killed and burned (or buried very deep in the ground), rather than kept in the hopes they may recover and put on flesh.

The purpose in fattening poultry is to increase the weight by addition of flesh, also to improve the quality of the flesh. Good gains can only be obtained with birds that are good feeders. Choose cockerels of rapid growing, rapid feathering, rapid maturing strains, because they fatten readily. Individuals that are husky in appearance and have broad, deep heads, short beaks and broad bodies make the best feeders.

Gains that can be produced by fattening, depend upon the size, age, and breeding of the birds, the ration used, and the methods of feeding. It is possible to produce a greater gain in weight with young birds of broiler size, than with more mature individuals, because in small birds the gain in weight is due to the addition of flesh, gains from 25 to 30% being common.

A ration consisting of a mash feed, mixed with milk is fed at regular intervals, and we have found the following to produce the desired results:

POULTRY FATTENING RATION:
880 lbs. yellow or white whole ground corn, 400 lbs. fine ground hulled oats, 200 lbs. rolled oats, 300 lbs. corn oil cake meal, 40 lbs. O. P. linseed oil meal, 60 lbs. red dog flour, 80 lbs. wheat middlings, 40 lbs. meat and bone meal. The average analysis on this feed will run protein, 14%; fiber, 3%; nitrogen free extract, 65%; fat, 6%.

An economical way to mix this ration is to use about 25 to 35 lbs. condensed buttermilk and 260 to 275 lbs. of water to each 100 lbs. of dry feed. This will produce a wet creamy mixture of about the right consistency. The quantity of liquid will vary according to the grain and time allowed after mixing.

All the moisture the birds receive, except in extreme hot weather, comes directly thru the feed. No water is given in addition, except when the birds are first put on feed.

Since no liquid is fed separately during the fattening period, products used in the ration are such as will absorb the greatest quantity of liquid without separation from the grain products used. Corn oil cake meal is used to the extent of approximately 15%, because it will absorb an average of four times its weight in liquid. At the same time it contains a high content of digestible pro-

tein, an average of from 8 to 10% fat. The protein and fats combined with the Vitamin "B" are what makes corn oil cake meal so valuable in the ration.

When the birds are received in the fattening station, it is necessary to starve them for about twelve hours, after they have been placed in the crates. Some stations give the birds plain water, others buttermilk, to act as a cleanser for the bowels before gradually bringing them up to full feed, and feed sparingly for the first few days.

During the first few days while the birds are becoming used to the ration, they should be given less than they can actually consume at each feeding, as it is highly important to not overfeed the birds at the beginning of the period. If the birds are taking their full feed at the end of the third day, from then on they should be given all they can clean up in 20 minutes. The surplus feed should then be removed from the trough, and the troughs thoroly cleaned immediately. This practice is absolutely necessary so the birds may maintain a good appetite and consume a maximum amount of feed.

The length of the fattening period for broilers should be about 14 days, and from 7 to 10 days for larger birds. Broilers will eat an average of from 12 to 18 lbs. of dry feed per 100 head per day, roosters from 21 to 28 lbs., fowls from 22 to 30 lbs., spring chickens from 18 to 22 lbs. The average battery of poultry will eat around 20 lbs. of dry feed per day.

It is not practical to ship crate fattened and finished birds to distant markets alive. Shrinkage in transit is too great. These birds are usually killed, dressed and packed in the feeding station, and shipped in refrigerator cars to destination.

Feed dealers of Pennsylvania made up a comitee that called on Gov. Pinchot Feb. 18, requesting his approval of state institutions using Pennsylvania mixed feeds. Their request was granted.

Wisconsin Laying Mashes

The Wisconsin College of Agriculture offers a number of simple laying mash formulas, for use with home grown scratch grains, such as a mixture of 300 lbs. yellow corn, 200 lbs. wheat, 100 lbs. heavy oats; or 300 lbs. yellow corn, 200 lbs. wheat and 100 lbs. barley. They are:

Mash No. 1 (The Big Five)	Mash No. 2 (The Bix Six)
Ground yellow corn...100	Ground yellow corn...200
Ground oats .....100	Ground oats .....50
Wheat bran .....100	Wheat bran .....100
Wheat middlings...100	Wheat middlings...100
*Meat scrap.....100	Corn gluten feed....100
Common salt .....5	*Meat scrap .....100
	Salt .....6
Mash No. 3 (Big Five Modified)	Mash No. 4
Ground yellow corn...100	Ground corn .....100
Ground oats .....100	Ground oats .....50
Wheat bran .....100	Ground barley .....50
Wheat middlings...100	Wheat bran .....100
Alfalfa meal .....25	Wheat middlings...100
*Meat scrap .....75	Alfalfa meal .....25
Dried milk .....25	*Meat scrap .....75
Salt .....5	Dried milk .....25
	Salt .....5

*Or substitute a good grade of tankage.
Add cod liver oil during fall and winter.

Rule Shows if Hens Pay Feed Cost

An easy method for determining whether hens are laying enough eggs to pay for their feed is suggested by Miss Cora Cooke, poultry specialist, University Farm, St. Paul. The rule is to divide the price of 100 lbs. of feed by the price of eggs per dozen, and multiply the answer by three. This will be the number of eggs 100 hens must lay daily to pay for their feed.

To illustrate: the feed used for one flock in December, including scratch and mash, cost \$1.41 per cwt. Eggs brought 22 cents per dozen. Dividing \$1.41 by 22 equals 6.4, and multiplying this by 3 gives 19.2 eggs, the number that had to be laid daily by each 100 hens to pay for feed. During December, the flock actually averaged 61 eggs per day for every 100 hens, leaving 42 eggs a day for profit.

It takes 14 days for a hen to develop yolks, but only 1 day to develop egg whites and shells. Daily feed develops whites and shells.

GOLDEN SEAL YEAST
for Poultry and Livestock
A Profitable Feed Ingredient
GOLDEN SEAL YEAST CO.
Cedar Rapids, Ia.

ALFALFA MEAL

Fine ground for Poultry Mashes
our specialty

**THE DENVER ALFALFA
MILLING & PRODUCTS
CO., U. S. A.**

Sales Offices for the Convenience of
Eastern Buyers: Pierce Bldg.,
St. Louis, Mo.
Home Office: Lamar, Colo.

What Do You Need in
Preparing Feeds?

Check below the items in which you are interested and mail to Information Bureau, Grain Dealers Journal, Chicago, and information on where to get what you want will be immediately sent you.

Attrition mills	Hammer mills
Alfalfa meal	Iodine
Blood, dried	Iron oxide
Bone meal	Linseed meal, cake
Buttermilk, dried,	Meat meal, scrap
semi-solid	Minerals
Calcium, carbonate,	Mineral mixtures
phosphate	Molasses
Cocoanut oil meal	Oyster shell, crushed
Cod liver oil	Peanut meal
Charcoal	Phosphates, rock
Commercial feeds	Potassium, chlorid
Cottonseed meal, cake	iodide
Feed mixers	Salt
Feed concentrates	Sardine Oil
Feeders for mills	Screenings
Fish meal	Skim milk, dried
Formulas	Soybean, meal
Gluten, feed, meal	Tankage
	Yeast for feeding
Information Bureau	

**GRAIN & FEED JOURNALS
CONSOLIDATED**

332 So. La Salle St. Chicago, Ill.



Corn Gluten Feed, Corn Oil Cake Meal,

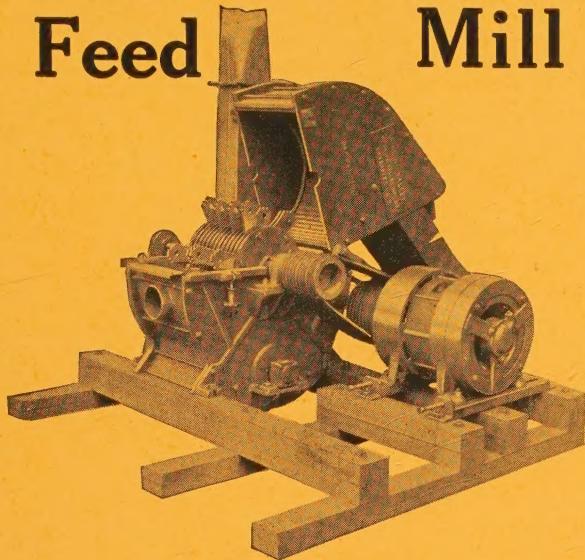
Brewers' Dried Grains

Malt Sprouts

ANHEUSER-BUSCH

ST. LOUIS

Hocking Valley Swing Hammer Feed Mill



BUILT TO LAST A LIFETIME
Capacity, Sturdiness and
Price Unequalled

The most efficient and economical
hammer mill on the market today.

*Write for literature
Distributors Wanted*

HOCKING VALLEY MFG. CO.
LANCASTER OHIO

"JAY BEE"

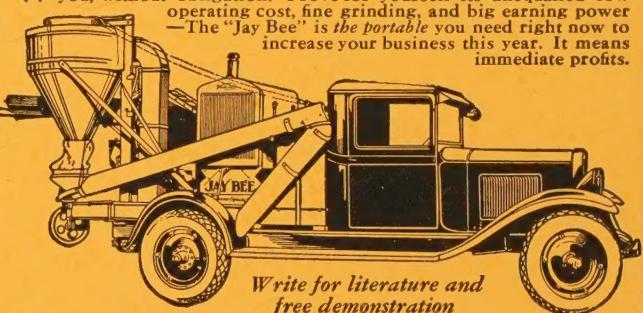
The Greatest of All Portables

The Most Economical
Way to Produce Feeds

WHEN millers who have operated stationary "Jay Bee" grinders find it necessary—and profitable to invest in one—two—and even three "Jay Bee" Portables, what more proof of supremacy is needed? Regardless of the type of mill, built by the Bossert Corp., Utica, N. Y., the world's largest hammer mill manufacturers, the public has always got the greatest value in a "Jay Bee".

THIS fact holds true for the "Jay Bee" Portable. Comparisons can be made only after the most exhaustive tests have been made.

WE SHALL GLADLY DEMONSTRATE the "Jay Bee" Portable to you, without obligation. Prove for yourself its unequalled low operating cost, fine grinding, and big earning power. —The "Jay Bee" is the portable you need right now to increase your business this year. It means immediate profits.



*Write for literature and
free demonstration*

J. B. SEDBERRY, Inc. 76 Hickory St., Utica, N. Y.
J. B. SEDBERRY CO., 819 Exchange Ave., Chicago, Ill.
JAY BEE SALES CO.
319-325 Live Stock Exchange Bldg., Kansas City, Mo.
A. E. THOMPSON CO., Minneapolis, Minn.

•THE FINEST ... AT ORDINARY COST•

PICKWICK HOTEL



500 ROOMS
with bath and radio in
every room. Exceptional
food at moderate prices.

SINGLE \$2. TO \$4.
DOUBLE \$3. TO \$6.
SUITES \$8. TO \$15.

Garage Adjoining
H. J. STEED Manager

TENTH AT MCGEE

KANSAS CITY



THE MILLERS REVIEW and FEED FORUM

THE MILLERS REVIEW
Established 1882

THE DIXIE MILLER
Established 1893

A MONTHLY JOURNAL
DEVOTED TO
MILLING, FLOUR, GRAIN
AND THE
MANUFACTURE OF FEED

Best Technical Articles, Feed and Grain
Markets, Association Transactions, Diver-
sified News, Feature Stories

Twelve Months for \$1.00

THE MILLERS REVIEW
and FEED FORUM

WALTON BUILDING

ATLANTA, GEORGIA

Reduce Fire Hazard in Grain Elevators

*Approved by Underwriters' Laboratories
for Class 2, Group G locations.*

**F-M totally enclosed motors
impervious to grain dust; high
efficiency and high power factor under fluctuating loads.**

Fairbanks-Morse totally enclosed type "QC" motors are ideal for service in grain elevators. Their windings are completely enclosed by a cast iron coil cover. No explosive dust can come in contact with them. External fans on both ends insure effective, uniform ventilation and cooling. No piping is needed—a worth while saving in installation cost.

Years of service are built into their cartridge-type ball bearings. The bearings are sealed against the dust and dirt, require lubrication only once a year—and then it can be done in a few moments due to easy accessibility. Wear is practically imperceptible and evenly distributed. Precise clearance between rotor and stator is maintained by the highest grade bearings in the

world. The air gap remains constant and power factor and efficiency do not change over a period of years of service. High power factor is obtained at all points between half and full load . . . an important consideration in selecting motors for elevator service, where the largest portion of the load is generally fluctuating. Efficiency decreases only a few points over the complete range from full load to half load.

Your request for complete information entails no obligation. Write for it today.

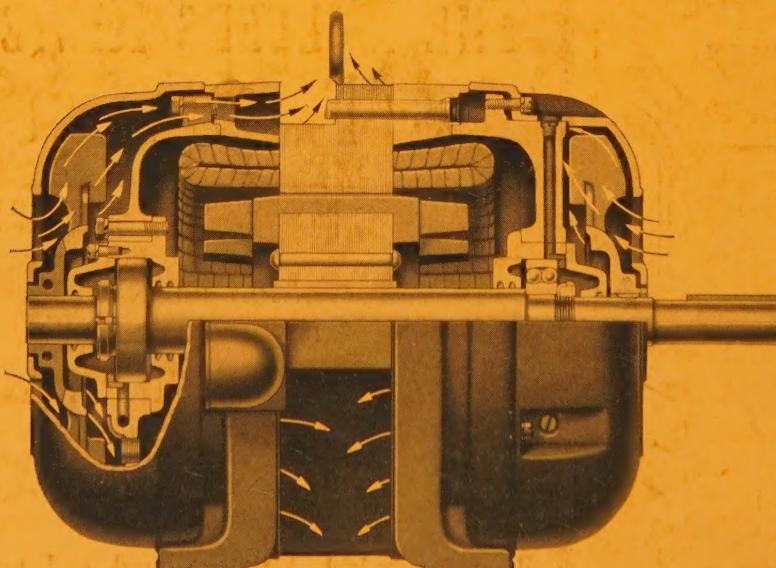
FAIRBANKS, MORSE & CO.
900 S. Wabash Ave. Chicago

32 branches at your service
throughout the United States



NOTE THESE MECHANICAL AND OPERATING FEATURES

1. **Two Fans**—provide two-direction ventilation through smooth, short air passages.
2. **Grease tube to bearings.** Greasing accomplished without removing enclosing shield or fan.
3. **Open frame stator**, with laminations exposed—excellent cooling under all conditions.
4. **Sturdy fans cast integral with end rings**, circulate air within the sealed enclosure.
5. **Cartridge-type bearings**—sealed against dust and dirt. Rotor can be removed without exposing bearings.
6. **Heavy cast iron stator heads** with broad feet insure rigid motor and substantial mountings.
7. **Electrically welded zones** unite stator laminations into solid mass.
8. **Stator windings insulated** by numerous coats of permanently plastic varnish.
9. **Easy to dismantle.** Fans have split hubs. Lubricating openings are below fan cover so that it can be removed without removing any pipe fittings.



FAIRBANKS-MORSE motors

PUMPS • SCALES • DIESEL ENGINES